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ISLAM BUILDS IN INDIA
(Cultural study of Islamic Architecture)

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Islam Builds in India

(Cultural study of Islamic Architecture)

K.V. SOUNDARA RAJAN

1983
AGAM KALA PRAKASHAN
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Dedicated to the
Chishtia, Aulia and other saints
Who tended Islam in India
Into a blossomed
bounty

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Preface

Islamic architecture in the Indian subcontinent forms a vast *milieu* by itself, for the authenticity of whose delineations, we have *not* to look beyond the borders of India, notwithstanding its being part of a much larger intercontinental movement which established itself first in the Middle East—or what is more appropriately termed West Asia. This movement, between the 8th and 12th centuries A.D. had consolidated its formalizations in this zone, with such firm terms of reference that its conspectus in architecture and aesthetics had become one of the major global events in art history. When this eventually spread over India, through the political invasions and conquest and rule by Islamic dynasties, between the close of the 12th century A. D. and virtually upto the 18th century A. D., it introduced, developed and perfected a series of inter-related regional and central formalization-spectra with a zeal and expertise that absorbed, to a phenomenal degree, indigenous craft and art specialization and the heritage of India. This naturally resulted in a totally fresh art panorama which was genuinely Indian.

Enterprises in the Islamic mode of erection, however, unlike those in West Asia, had to begin from the very beginning, in view of the problems related to arcuate style and techniques, which Islam in its former ages and climes was wedded to in West Asia, North Africa and the Mediterranean Europe, bearing the stamp of wood and brick raw material usage. This arcuate style had no known corresponding growth in India till then. In India, trabeate erections had been the chief mode in its Hindu, Buddhist or Jain constructions for religious as well as secular art all through. Instead of imposing straight away the arcuate heritage of West Asia, as a hot-house plant, the early rulers of Delhi were content with and inclined towards involving local craftsmen who were great experts in stone craft, in the task of steadily attuning them to their new assignments. The conquest of the land of a dominant Hindu faith by Islam had itself its own emotional overtones on both sides. The initial stages, therefore, witnessed a peculiarly clumsy technical disarray, a charming disarticulation and a picturesque hesitancy in the stone-building modes –which are clearly reflected in the monuments of the early Sultanate period. This was quickly got over by the Khilji times by adventitious intrusive impulses from outside and the stage became set for a fundamental contribution to arcuate enunciations by the close of the 13th century A.D. The mosque, *madrasa* and *maqbara* become the treble type-fossils of this Islamic hieratic movement thereafter, and Indian workmanship on stone especially, besides rubble, mortar and plaster, found its own level. The trend got a brief but spectacular restitution to the trabeate modes and in a big way, under Akbar the grand Mughal

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(and to some extent, his son and successor Jehangir) as an extension of his personality. It was restored to its evolutionary mainstream under Jehangir and Shahjehan.

Much has been written about this Islamic architecture which was evenly spread over the whole of Hindustan and much will be said in future also. In the present work, the author, with credentials mainly for art history and architectonics, has set to himself chiefly the stimulating task of understanding the motivations, inner content and rhythm of Islamic building style in India as it unfolded itself, by a scrutiny of the factors that link the prevailingly discrete formulations influenced by local *ethos*, crafts status and political or elitist outlook on the art programmes of the regional Islamic kingdoms, with the Imperial standards prevailing chiefly in the capital at Delhi.

Style is a product of the environment which is both natural and cultural, in every case. The outlook of the reigning monarchs of Islam had varied considerably, both in the initial and developed stages, and wherever requisite leadership has been assumed by the ruler—as with an Iltutmish or Firoz Shah or Akbar or Shahjehan—the results had been fundamental, concrete and inspiring.

The thrust of this book is to add footnotes, as it were, to the impressive, visual conspectus of Islamic constructional programmes, under the Imperial and regional initiatives; and to emphasise the total and absolute character of the legacy shaped out of these, without necessarily underscoring always the pure religious fervour, or flattering the support given officially to Islam in this task, in differing degrees, by its own overlords. The book has the complementary objective of illuminating, with the torch of contemporary evidence and palpably perceptible vestiges, such of which are yet available *in situ*, the original charcter of certain of the less understood remains, of their techniques and layout. The author, while taking the aid of existing published epigraphical data on these monuments, was essentially concerned about the features of the buildings—as they exist—and not overmuch about their builders or the attributed temporal or religious context of its creation. This is how, according to him, art-history in itself should profitably be imbibed. It is hoped that the sampling data furnished will create a fresh interest in these studies and will lead to a better appreciation of the ardent endeavours of the craftsmen who had laboured with deliberation to produce such a comprehensive vista of architecture.

A mere descriptive treatment, highlighting only some of the landmarks, as is often undertaken, may fall short of understanding the deep involvement of the society, then in ferment, in the formal concepts and visual articulations thereof or may expose one to the charge of taking with the left hand, what was offered with the right, No study of this art-history can claim legitimacy, unless it examines the integrative links which furthered such colossal enterprises in various parts of a vast country at a time when, alike due to political as to historic reasons, the contemporary reaction to the special creations of a new religion had been one of impassive scepticism. Retrospective adulation as much as retrospective criticism, is ungracious, but while the former could be excused as

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innocuous, the latter may clearly be unbecoming, in the field of art; only a retrospective evaluation by its own contemporary chronicles and of the creations themselves will stand scientific scrutiny and keep the historiographic perspectives uninjured and healthy. Islamic monuments have yet a claim, thus, to be studied objectively, without fear or favour, and certainly *without blinkers on*. Whatever has been offered in the present book is enthused by such a sentiment.

It is a pleasant duty of the author to inscribe with gratitude the valuable insight that several of the knowledgeable Islamic colleagues and friends had created in his perception of the Islamic heritage. Several colleagues had also helped in various ways in the fulfilment of the author's special efforts for the close examination of the monumental remains.

The acknowledgement for most of the photographic illustrations will be due to the photo archives of the Archaeological Survey of India and its regional offices, for which ample thanks are offered and which is duly acknowledged.

For the persevering labours in the preparation of the line drawings so necessary for annotating or illustrating the details of the monuments, the author's special thanks are due in good measure to his colleague Shri M.S. Mani. It would be difficult to estimate the degree of involved help rendered by his friend and colleague Shri K.S. Ramachandran in the format and press work.

To Agam Prasad would go a special credit for his agreeable insight into the character of production and its requirements, and the magnificent job he has made of it in a reasonably short time.

The author shall be failing in his duty, if he did not record his devout mental respects to the great saints of Islam in India—to whom the book is worthily dedicated—who had cast a subtle spell on the author's own spiritual ken.

Lastly, it is a matter of joy for the author to thank his wife, Kumuda, for her reassuring interest in the concept of the book.

It is the wish of the author that young scholars and students may draw from this book mainly a commitment towards an objective appraisal of this grand art-bonus which accrued to the pristine and already massive cultural legacy of India, and in that process, added not a little lustre to the 'muse' of Indian architecture.

It is the particular satisfaction of the author that this book stood completed in the year of the fourteen hundredth anniversary of the Hijri era. Art is indivisible and Islamic architecture claims a genuine consanguinity with the overall art legacy of India and was certainly built to endure.

K.V. SOUNDARA RAJAN

New Delhi
January 1983

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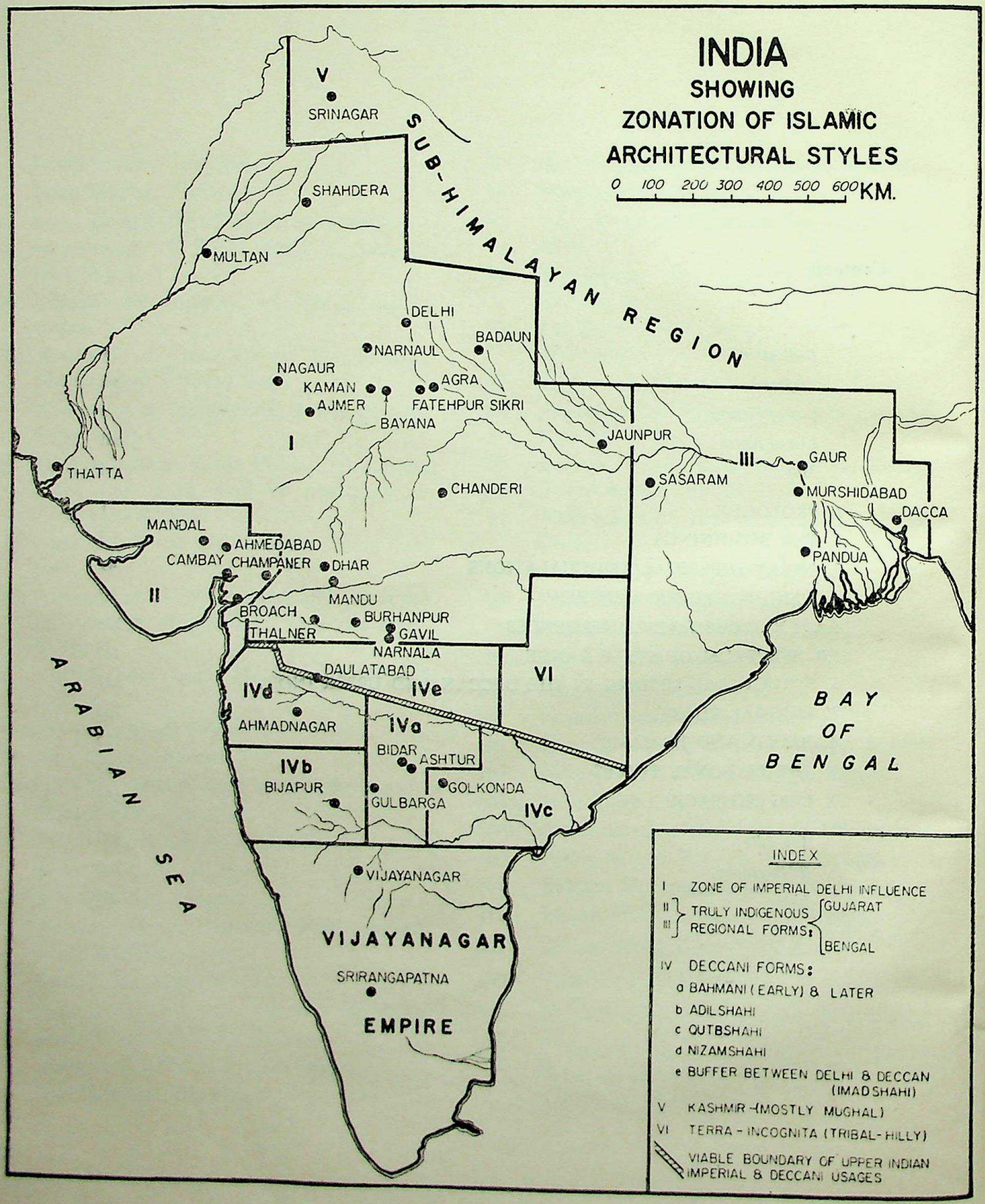

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One

Prologue

Studies in Islamic architecture in India had been conditioned by several factors—emotional, ethnic, denominational and academic—and in the overall picture, one may make bold to say that the imperative need of its studies in depth has not yet been fully vindicated. Historical, and sometimes even political undercurrents may have played a part in preventing the study from being integrated with the pan-Indian *ethos* of cultural motivations. It would be appropriate to state that in comparison to the sheer volume of available data, visually arresting and intrinsically justified, it had not received the deep and comprehensive understanding of the intricacies involved, even from a purely architectural or formal aspect. Perhaps, it was also due to certain reservations non-Islamic scholars had towards this sector of building activity with which they did not have an inner involvement. Scholars who had the opportunity to delve into its magnificence and detail often generally fight shy of perceiving the complementary character of the study, in the totality of Indian craft-achievement that it truly reflected. This was partly because they themselves could not fully extend or stretch their own *psyche* to that degree.

In the sequel, any fresh or original study on the subject should be rewarding from whichever quarter it comes. At the hands of those who have an involvement with the art-history of India, it is all the more rewarding, as it gives an opportunity to consider it as a continuing part of the overall national heritage in monumental architecture. It is in this spirit that the present work is undertaken, with the academic modesty the study invokes and the perception of the art-historical variegation its potentialities permit. A history of Indian technical craftsmanship in architecture—which still remains a wish—would itself be palpably incomplete, if one were not to take note of the masterly creations of the Islamic building programmes often seen to be contemporary with corresponding creations of Hinduism and Jainism, of a different base, ilk or emotion. When we realise that this Islamic architectural wealth in India was totally 'Indian' and persuasively indigenous, we would also realise how much of big segment of aesthetic and formal visualization could have been missed, if an overall integrative study of the data on the subject had indeed not been available, from competent scholars or architects such as, for instance, Percy Brown's which is by far the most balanced technical presentation on date.

Even so, these programmes of formal erections unless they have been woven into the warp and weft of Indian craft concepts could not be fulfilling. What the land and its people, in several successive generations, from the epoch-making terminal decade of the 12th century A.D., had been witnessing with awe and mystery and seeming reluctance, deserves to be inscribed into its annals, not merely to be paid a fatuous tribute to its euphemistic designation in the latter day as the 'composite culture' of India. There is indeed nothing that is merely composite in this culture. It is just a continuing role fittingly and ambidex-

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trously played by the master masons, architects and artificers of India as an avowed function in the then inexorable times. No constructional art is truly one-sided; it is always the crystalization of the unified potential and growth of the expertise of its environment, and undertaken with respect, honour and competence.

As the product of an environmental shift, above all, which was ever varying in the otherwise geographically stable Indian panorama, from century to century of those eventful years, it is worthy of being more closely understood. The totality of the Indian landscape, in the picturesequely kaleidoscopic hinterlands, with its hills and valleys, its rivers and lakes, its cities and villages, naturally imbibed this new building programme and brought forth unknown facets of constructional splendour which was to become ubiquitous guidelines for late medieval India. The temples and mosques of India—its palaces, mausolea and fortifications included—became the indivisible parts of its constructional format and genius, which no subjective dissection or notional bias can arbitarily sunder into isolated segments. Its analysis is a part and parcel of a self-analysis of the indomitable urge of the Indian craftsmen, to live up to the expectations from them and to leave the judgement to God and to future. One would note that in Upper India, during the last two centuries and more gone by, all temples for Hinduism built even in predominently Hindu populated areas, are the patent products of this fusion of art-strains, and one cannot question this transformation on a whim.

This book is then not an academic historical study of the Islamic religious architecture, but as the sub-title indicates, is a series of footnotes added to illuminate the expanding panorama of construction and artifice that was modulated as a medium for furthering a new religious purpose, and does not imbibe any polemics that could be part of its theology. It is concerned with the strides made by Islamic architecture from the time of its early motivations in India—as a new chapter to its still earlier annals in West Asia in the Safavid, Seljuk, Abbasid, Umayyad, Spanish Moorish and even African episodes and ultimately elaborated in India—for which the political aggrandisement, imperialism and rigour just served as a temporal backdrop, but could not colour or cloud the art-exercise implicit in its architecture. Thus, an art-historian can divest it of its polemical frills, and consider it as the finite organisation of the prevalent art-expertise to suit the needs and circumstances of a new faith or religion. The buildings are the material evidence of the creative endeavour of the genius of the age and form the canvas for the visual architectural perspectives of their patron, architect and artisan whose credentials for the same are based on their own imaginative and aesthetic commitment and are neither stymied by the morbid or biassed historical incidents or developments, nor coloured by the execrable excesses of zealots or despots.

The chief aim of the book is thus to integrate the articulations of Islamic building modes, so impressively present in India in both time and space and to divest them from being thought of as a vested interest in religion but as the realities in the art of the age—with their inevitable progressive or retrograde vicissitudes and as a pool of art-traditions which reflect the continuing exposition of the eye for beauty, harmony, symmetry, perspectives and emphasis in its motifs; as an index, in short, of the art-status of the age when two powerful religions were juxtaposed.

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Two

The Beginnings

At the time of the earliest advent of Islam into the Indo-Pakistan sub-continent, it was mostly occupying the area from Sind to Gujarat, on the coastal belt. They were mostly Arabs and their main objective was trade and not seemingly any expansionism or an empire building *penchant*. That was almost from the end of the 8th century A.D. and the general political conditions were such that a traditional bias in favour of trade and commerce prevailed all round which also forged some reasonably firm bonds of cordiality between the Arab settlers as well as the rulers in charge of the area. Their first consolidation was, however, not seen till the 10th century A.D., and even then was largely in the Sind area. The coastal Gujarat in Saurashtra and further south in what was till then called the Aparanta territory of the Deccan, was an area which was rather ruled lightly, without any imposition from its monarchs. There had been such friendliness that the Rashtrakuta King 'Balhara', as he was known to the Arabs (and Vallabha, in Sanskrit, from his title) had even fully provided limited autonomy of a socio-economic kind in the coastal belt, and local governors were equally Muslims as well as Hindus. Sanjamana (Sanjan) was one such area which was a centre of much trade-guild activity, mostly of Arab traders, with a great freedom to carry on their way of life. Between this and the purposeful thrust by Mohammad Ghori and his cohorts at the battle of Tarain humbling Prithviraj Chauhan, there is a significant transformation of time and clime, and we witness the inception of a new urge which slowly but steadily enwraps and often enraptures the art-historian by its new vista, where a new and alien religion, for the first time in India, assumed the force of a rallying cry—a banner to be carried forward by the sword by its protoganists like Ghazni, Gengiz Khan or Timur with determination, dedication and a decisive surge. Destiny indeed made India then the most eloquent terrain for the sprouting of a new school of art and architecture—which had been, in the past, called variously as Indo-Saracenic, Mohammedan or Islamic but could be more appropriately be termed as 'Indo-Islamic'. The Indianness of this architecture, as it unfolded itself, was fundamental, while the Islamic functions for which the architectural creations were raised created hitherto unknown trends in both form and philosophy in India.

Expertise, Design and environment

These new cultural motivations were informed by special adaptations of resources, expertise, design and environment and would deserve to be dealt with at some length. At the time constructions for the sole purpose of sustaining the new rulers were ushered in, there was no immediate perception of the special expertise it should necessarily demand, if it had to put on a distinctive look. The circumstances under which, as a purely tentative measure, Mohammad of Ghor was able to station some of this most trusted slave Governors to hold on to his spoils of war and get the local atmosphere inured to

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the change of scene, were such that it was not indeed possible for the ruling group to commandeer a chosen and select band of craftsmen of their own with an assured knowledge and understanding of the heritage and inner content of the movement that has been launched, politically as well as culturally.

This movement from a mere battle cry for subjugation had yet to gather stamina and acquire a specific social shape, for formulating constructions which can reflect the new 'order'. Thus, what we witness in the first few decades of the 13th century A.D. under the Slave rulers or what is usually called the Sultanate of Delhi, was circumscribed both territorially and artistically. The area around Delhi and a contiguous area upto Ajmer in Rajasthan along the Aravallis and upto Badaun on the Ganga to the east and Kaman and Bayana to the south-east was the chief ambit of the then rulers. Times were indeed as uncertain as traumatic, both for the ruler and the ruled. Bridges of understanding and conciliation had yet to be built; bonds of political acumen and maturity yet to be forged. The four chief rulers of this Sultanate, namely, Qutbuddin Aibak, Shamsuddin Iltutmish, Sultan Razia and Ghiasuddin Balban (the last often considered as an Afghan interlude) were still groping in an as yet inconfident atmosphere of 'trusting in God and keeping the sword-edge sharp'. They had yet an immediate purpose: to create a certain impressive stamp of both authority and knowledge—ability in monumental erections for their religion. It does not occasion any surprise, thus, that they preferred to improvise their activities of building erections by fashioning them on the elevational schemes of native religious building craft but, at the same time, garnishing them with some special motif or modality which underscored the fact that the new rulers have come to stay and are not likely to allow a let-up in the political grip they had so spectacularly achieved.

Thus, the first attempt was to mainly initiate a fairly extensive building programme which could provide an immediate counter-blast to the existing and indeed continuing indigenous building styles for Hindu-Jain religious usages. The Islamic religious edifices that the indigenous craftsmen were to be subsidised for, would have to be both authentic and visually arresting. It had to cut through or, if we may say so, tear through the secular traditional creations and impose a new panorama, a high point and a vision for future. Thus the very earliest creations that we find in Delhi, Kaman, Bayana, Badaun and Ajmer fully subscribe to this strategy and though yet architectural palimpsests and a congeries of parts, assembled out of the vast array of ruined or standing local structures, had managed to assume a new skyline and formula. The Islamic mosque, thus, comes into existance but was not yet the totally integrated and conceptually cohesive programme it became in the 14th century A.D. It was the format rather than the detail that had first to be introduced. It had to create a new venue for concerted religious exercises. It had to train up a religious clergy for organising the new activities in these campuses. It had, in other words, to provide for the viable alternative to the existing modes of worship and allow the people of their and other ilk to absorb the scene and to impregnate their minds with a new collective and congregational religious activity that can serve as a foil to the admittedly rich array of indigenous temples. In their new programmes, thus, size was more important than scheme, splendour more urgent than sophistication, spirit more important than letter. It should also have

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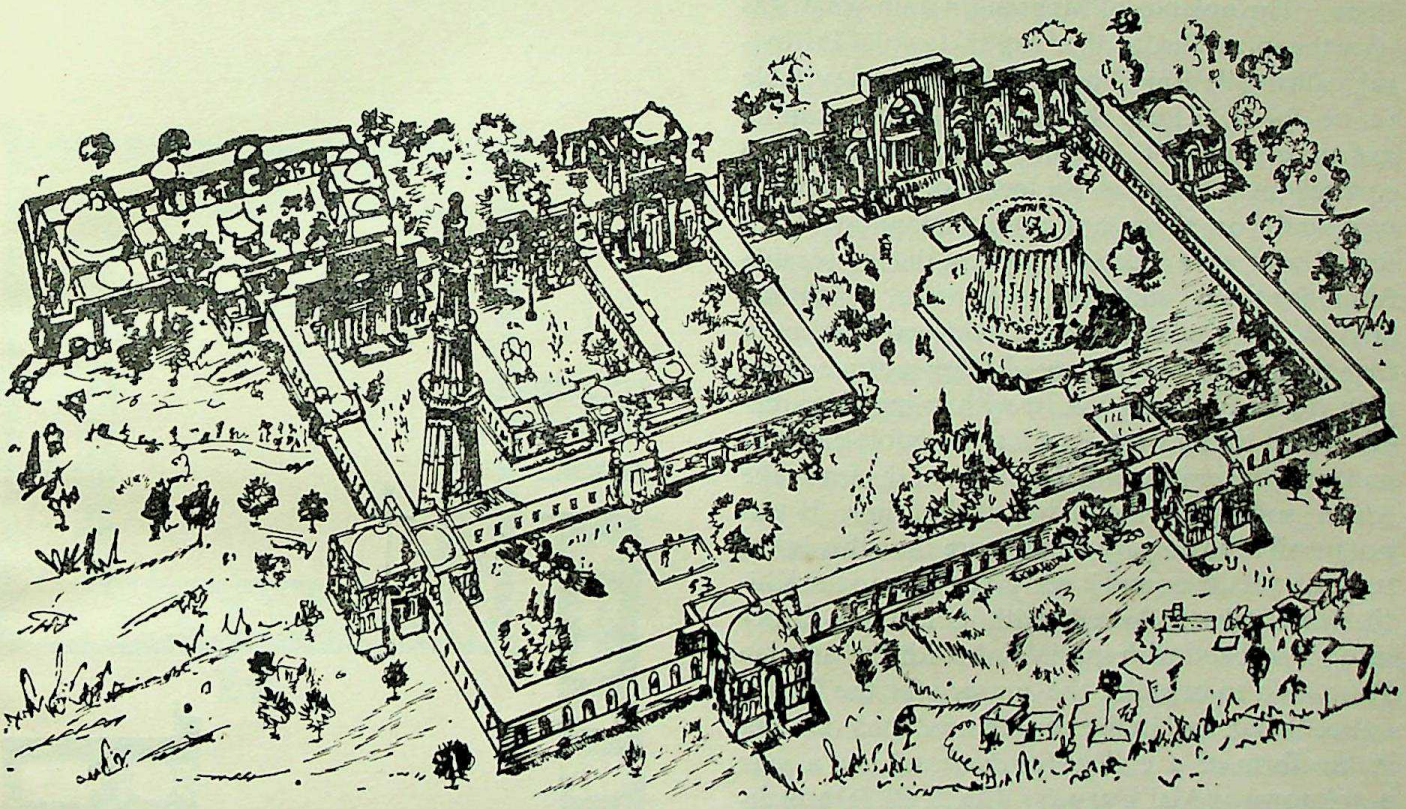
1. *The Qutb Delhi, conjectural reconstruction of the monument complex (after A.S.I.)*



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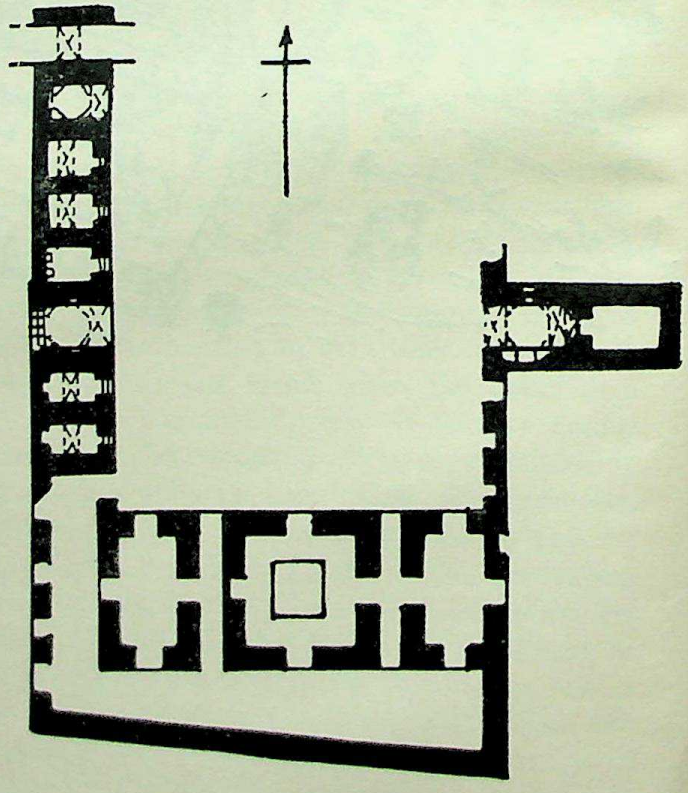
2. *Allauddin's College (Madrasa), Qutb complex, Delhi*



the visible effect of superseding the existing panorama. The uplands of Mehrauli within what was once the sprawling fortified capital town of Prithviraj, called Qila Rai Pithora, was the most suitable venue for it. Thus, the earliest Islamic capital and the complex of Islamic monuments squatted squarely over the *quondam* locale of the Chauhan writ, and from there sent out a metaphorical call for all who were indecisive to scan the foreseeable future for them, under the new 'order' which had arrived. Nothing could have achieved this more than the aptly named *Quvvat-ul-Islam* mosque-complex, (fig. 1: Pl. I and A & B) with its massive arched screen to the west, its pillared double cloisters and multiple entries and last, but not the least, the *Minar*, solitary though it was at that time. It was not possible to do very much more than this in the tumultuous times, and it was given only to the Khilji dynasty that followed, with its feet dug firmer into the soil and with special link with the Iranian West Asia to organize the nursery for the future, out of Seljuk and indigenous trends, constructions in the form of a college (or *madrasa*) and a gate now known as Alai Darwaza (fig. 2: Pl. II) attached to the mosque-complex where the embryo for the mass permeation of the faith had to be nursed, groomed and commissioned. The *madrasa* system had, indeed, since then, upto the very advent of the Mughals, proved as one of the most significant adjuncts to the mosque everywhere in India, where the ecclesiastical as well as the religious facade to the otherwise politically preoccupied rulers, had been built convincingly, here and at Ajmer in its Arhai-din-ka-jhonpra mosque (fig. 3: Pl. III) of the time of Iltutmish, and elsewhere in their circumscribed Sultanate.

The earliest mosques in India have the common factors like straight, flat roofed prayer

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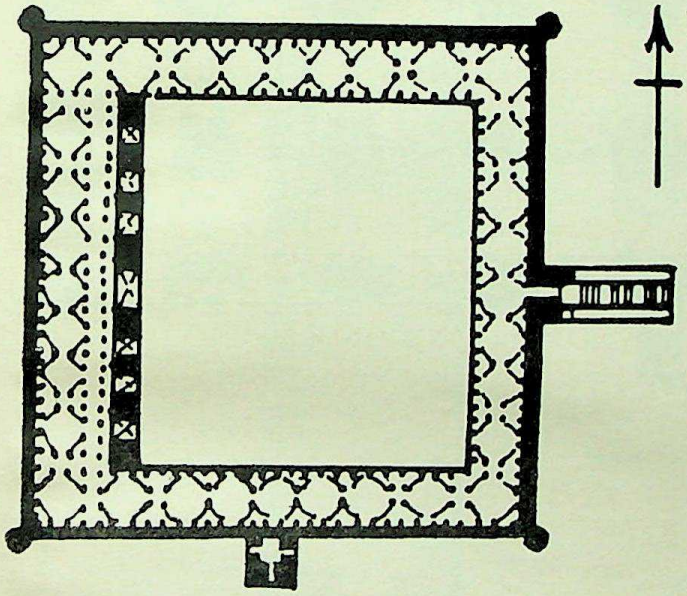
3. *Arhai-din-ka-Jhonpra mosque, Ajmer, plan*



chamber, a large courtyard and a delimiting compound wall with or without cloisters whose roof also was flat. They were seemingly taken on the parallel of the Medina mosque of the time of the Prophet where thatched roofs were serving as prayer chamber within an enclosure and on the low stem of a totally truncated palm tree, serving as a seat, the prophet used to organise the *Jamaat Khana*. This seat was later on replaced by the *mimber* were the *mulla* would sit. All such early mosques did not have any dome or where started had only one dome in the intersection of axial and transverse bays of the prayer chamber. We have also examples of such a type in India where, built of rubble stone, the prayer chamber and cloister corners had sometimes vaulted or domed roofs. The evolution of the prayer chamber with a central wider bay, raised taller, was a subsequent stage where the *mihrab* and *mimber* could be clearly seen from outside and would be well ventilated and have allowed natural light. These models of rectangular vaulted domes were copies of timber and tile or thatch architecture,and, even in Mughal times, when they were built entirely of that design or integrated with the side cloisters where existing in their parts, alternating with domed bays also, as in the Pathar Masjid (fig. 4) and Akhund Mulla Masjid (fig. 5) at Srinagar (Kashmir) or the mosque of Shah Daulat Dargah at Maner(Bihar), it is easy to identify them as the natural devolution of the gable roofed residential pattern adopted for both temples and mosques in this region. Even in entirely secular structures, as in the Pari Mahal (Terrace 1) garden, Srinagar (fig. 6), the lower *dalans* were gradually raised in their arch height towards the centre, with the upper floor *dalan* also formed with gradually taller domed chambers towards the outer side; and the design (which in its original should have had a cornice projecting forward between the two floors) had been drawn from the gable type so characteristic of Kashmir temple/mosque architecture. The provision for a *Zenana* gallery (fig. 7) at one end of the prayer chamber or both ends had also been a practice which had come only subsequent to the Mamluk Sultan stage, before which perhaps ladies were never admitted into the open congregational worship pattern. It occurs only from Tughlaq times widely in Western India, Central India and

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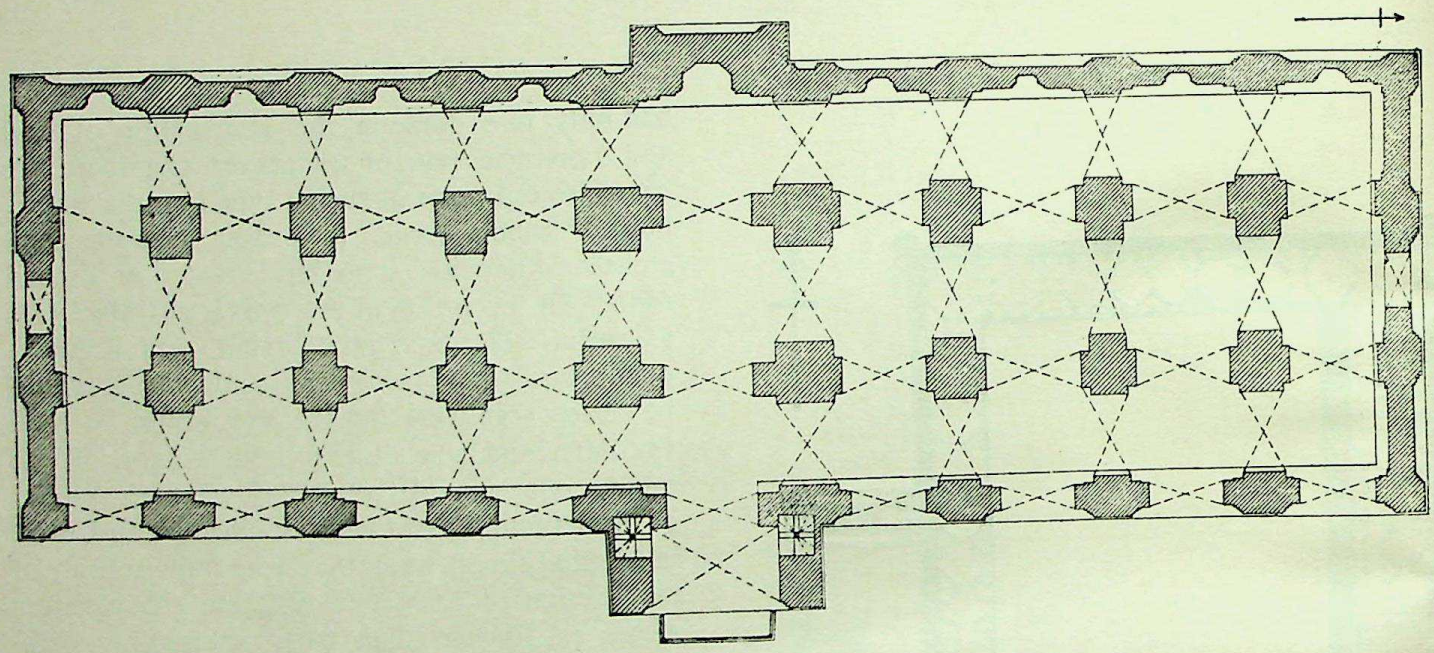
4. *Pathar (Badshah) Masjid, Srinagar, plan*



Delhi. It is not seen, however, from the Mughal times. Similarly, again, the use of the mosque as also a *madrasa* for religious education is prevalent only in the early stages upto the pre-Mughal times or in fact upto the end of Tughlaq times. It is not found prevalent in Mughal mosques, as the *madrasa* became thereafter a separate structure unconnected directly with a mosque. The *wazu tank*, similarly, is a secondary addition in the mosque courtyard. The *minar* which was invariably only one, both in West Asia and in India, in the earliest stages, became a pair and got integrated with the mosque later, where again its position in the central facade flank is relatively earlier to its relegation, later, to the corners of the prayer chamber facade.

We should now consider the resources, by way of building materials, that were at the disposal of the patrons of this new order. Delhi, being located at the terminal outlier of the Aravalli hill chain, abounds in ridges of low hillocks of a rather metamorphosed variety of quartzite which does not fracture well, is indeed found in massive blocks and laminated lumps; and is an all too poor a material for working for decoration or

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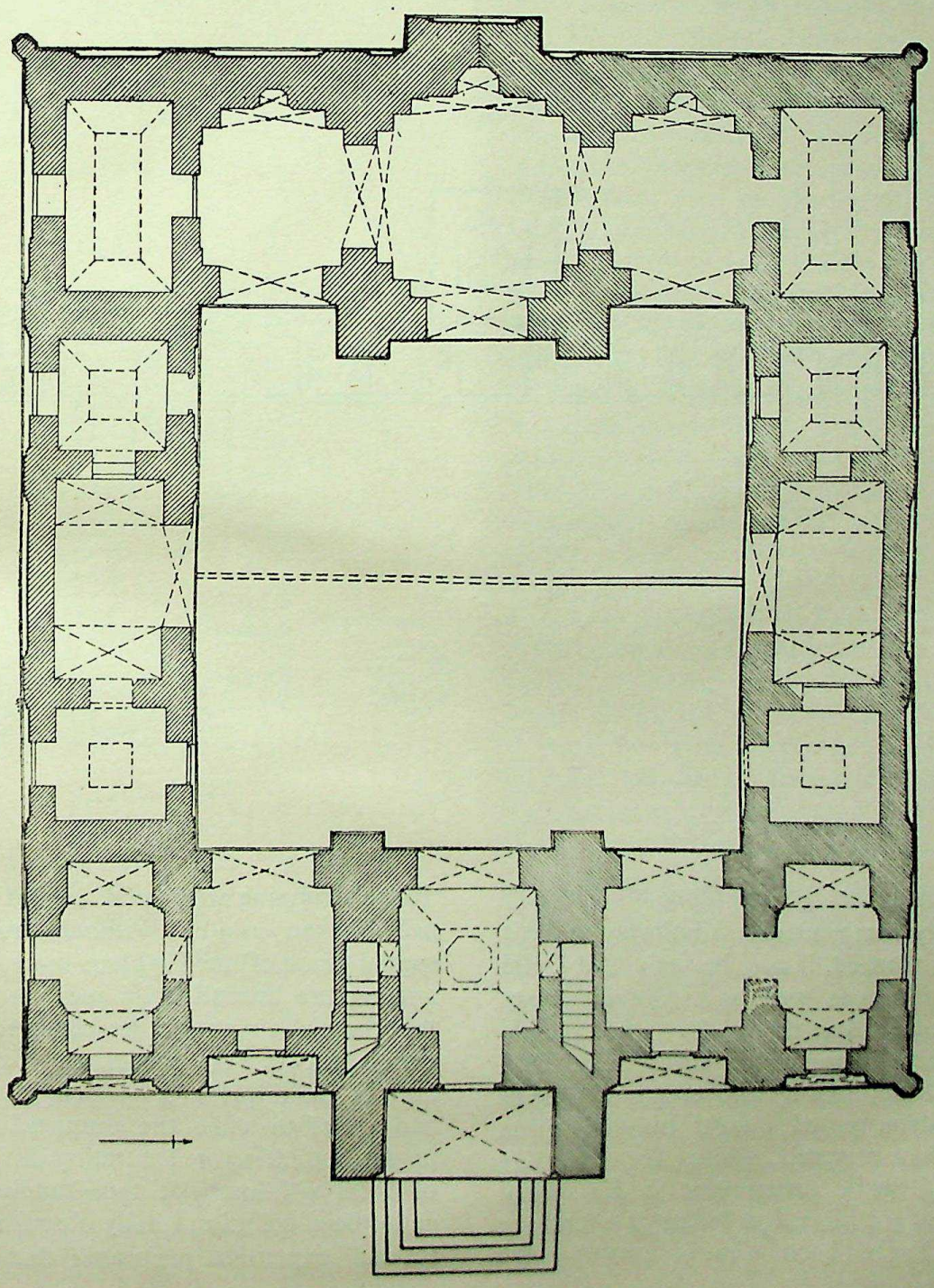
5. *Akhund Mullah Masjid, Srinagar, plan*



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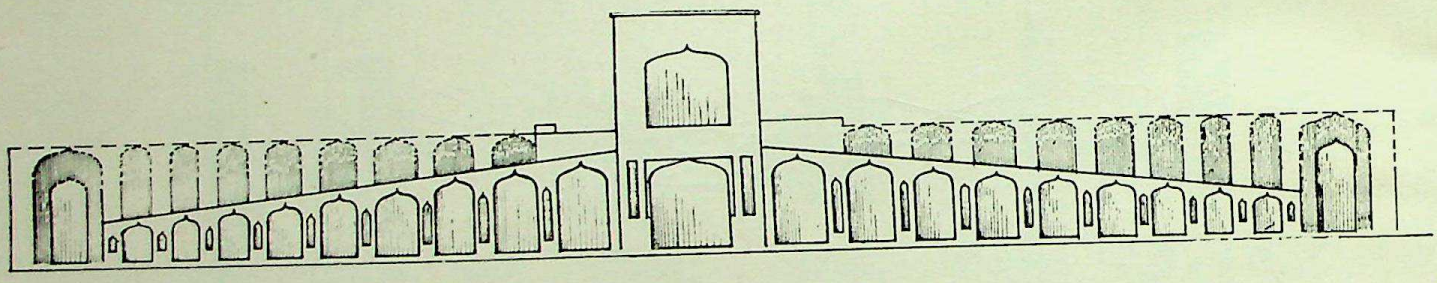
6. *Pari Mahal garden, Srinagar (Main terrace), Elevatian*



detailed carving. But its nearness at the very zone of activity commended it admirably to basic constructions. Indeed, it may be said that Delhi was, alike a plateau as well as an alluvial dusty flat, full of rocky ridges set amidst a scrub jungle yielding modest game for the hunter. This had been even better utilised by a succeeding Sultan of the Tughlaq dynasty and a great builder, Firuz Shah, who had a special liking for 'hunting boxes', useful while giving vent to his special pastime. They are all called '*shikargahs*' and are found in north Delhi on what is known as the 'Ridge', running all around behind the Rashtrapati Bhavan estate. Without anticipating this special phase of the Tughluqs in so far as Islamic architecture around Delhi goes, we may just add that these and many other constructions of that period and even the earlier and later ones were built of Delhi quartzite—which, in recent times, had tended to slake the unquenchable thirst of modern builders for saturating this historic plain of Delhi with inartistic multitudes of residential and official colonies, totally obscuring the beautiful and expansive panorama that once existed

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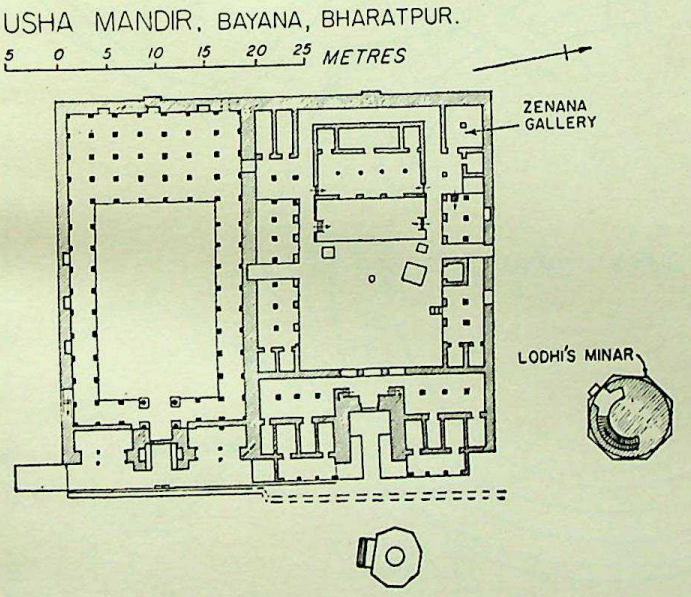
7. *Early zenana gallery arrangement, Ukha masjid, Bayana*



here, punctuated by the remains of seven successive Islamic empires, before the advent of the colonial British, as the eighth to be historically laid low, before the dawn of independant India. This stone raw material was fully utilized, even before the time of the arrival of the Slave dynasty to initiate its rule, as by Anang Pal Tomar for his Suraj kund (fig. 8) and by Prithviraj Chauhan in erecting his '*Qila*' around Mehrauli (fig. 9) and its environs. This had inevitably, therefore, appealed to the new Islamic rulers. Although used largely for foundations and core-walls with plaster laid on exterior, a better and softer rock for carvings and embellishments, had to be found soon. Here, again, the close neighbourhood of Delhi in Uttar Pradesh and Rajasthan provided the answer with their sandstone and marble respectively. Though labour would have been admittedly cheap in those spacious days of the new Islamic empire, and craftsman would not have been hard to seek, the problem would have been one of formula and design. Nothing of the Hindu craft *penchant* alone, in this respect, should have met the needs or approval of non-representational art-outlook of Islam and hence the early designers of the Sultanate would have found the experimentation, fresh, stimulating and original. Arabesques, calligraphy of Quoranic *ayats* and simple chess pattern or floral decorative work would have been the answer to such a requirement. So indeed it was in respect of the Qutb mosque which, before the credulous eyes of the native gentry, incredibly rose with its lofty screen and loftier *minar* to soar into the pallid sky, with bands of decorative ornament of the above class, interleavened here and there by marble bands to emphasize and heighten the outline or the segments. While the screen wall (*maqsura*) rose vertically, slender and lofty, the cloisters had to be

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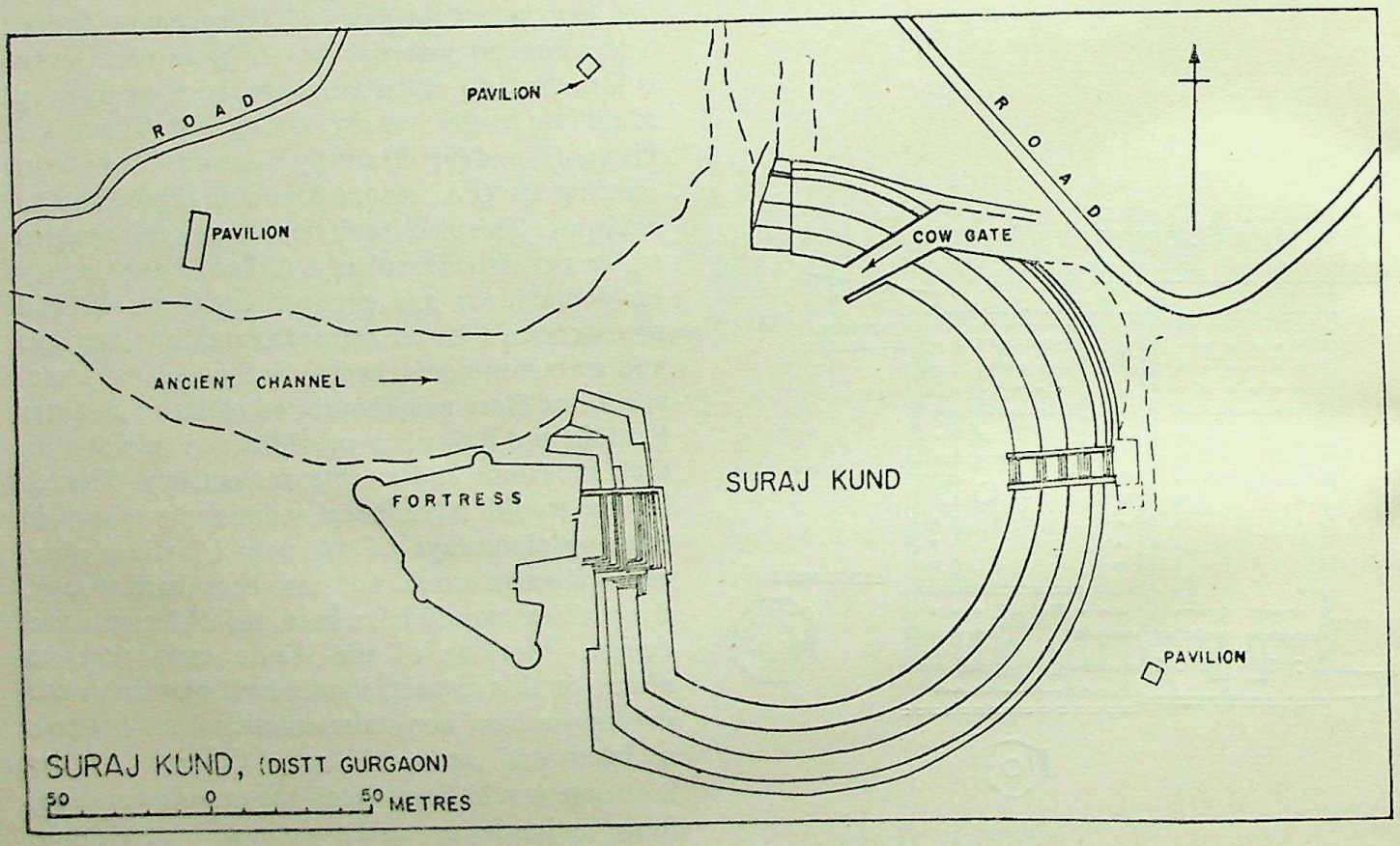
8. *Suraj kund, plan*



kept single or a low double storeyed one, again to accentuate the elevational skyline and to present the layout as more of spatial and vertical contrast, with quadrangles eventually yielding design *repertory* for the future finite mosque *ensemble*. All this was done seemingly using indigenous craftsman and artisans guided by the royal advisers. The landscaping of the layout was naturally helped by the rather rolling and often terraced ground unfolding before oneself at Mehrauli, towards Badarpur

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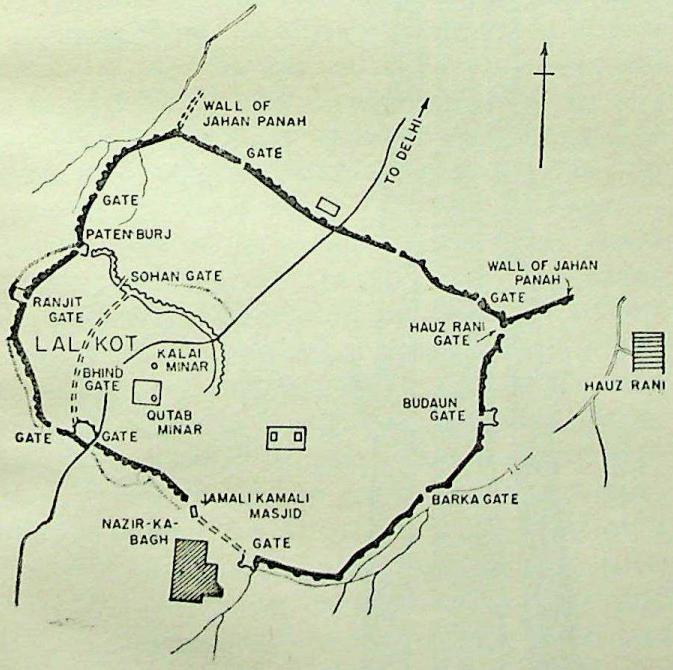
9. *Qila Rai Pithora Fort, Delhi*



and Ballabhgarh and the north-westerly ridge profile. Under all circumstances, the high point of Mehrauli had to be augmented artifically and, as we see it, the conception of the stupendous *Minar* (fig. 10 : Pl. IV A & B) to the south-east of the Qutb mosque would perhaps have been the single most eloquent historical tribute to the formative design and layout expertise of the new builders. It would be possible to digress on the enigmatic *Minar* and its design, often made unavailingly controversial, but that would indeed lead us astray. Suffice it to say that it was no part of a Hindu design tradition in its total form but was the touch-stone of the new *elan* of the early Indo-Islamic architecture. It was authentically outlandish, majestically focal, and indisputably ceremonial as an adjunct to the sprawling Qutb mosque-complex, for the *muezzin* to call the faithful to prayers in this Jami mosque, in which seemingly the Sultan himself was often a distinguished participant.

The Nonage

The name, Mehrauli, immediately strikes a chord and suggests that its original name which should have been Mihirapuri may have been once a centre of Sun worship, perhaps in the Gupta times from the fact that the 'Iron pillar' inscription (found within this Jami Masjid) calls the place Vishnupada—which is a well-known geographical land mark referred to in the Mahabharata epic. It may be further assumed that the solar form of Vishnu was perhaps enshrined here and was also one of the additional reasons for Qutbuddin to select the place for the ministrations of his own religious structural programmes. Be this as it may, the aspect that would

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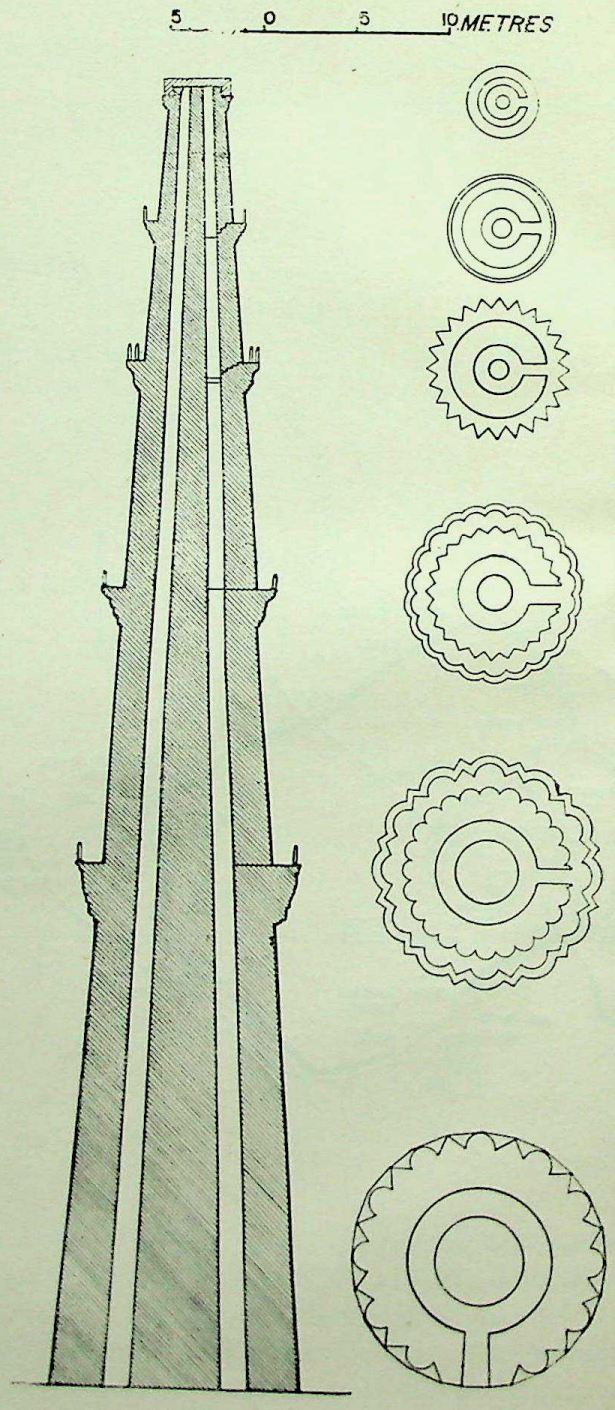
10. *The Qutb Minar, elevation details*



interest us more at this stage is the fact that the presence of not only the 'Iron pillar' and perhaps some readymade cloister layout even in decrepitude here must have commended itself to the Sultan's architects to integrate it in their own plan. *Tarikh-i-Firuz Shahi* (*Kism* IV, *Mukaddam* 9) contains a reference to Sultan Shamsuddin Iltutmish having raised a large pillar in the *Masjid-i-Jami* at Delhi. It is not clear if this is a reference to the 'Iron pillar'. If so, it could mean that this Iron pillar is not *in situ*. However, it is seen that even during the Tomar times, there were some traditions associated with this Iron pillar as narrated in the records (*A.S.I.-Report 1882-83*, Varanasi-Delhi, 1969).

In this connection, it would be interesting to note that the geographical data in the *Ramayana* of Valmiki would tend to place Vishnupada hill further north, towards the Sivaliks, between Kuru-Janghala and Kuninda territory. If this is acceptable, we do not have any details as to how this 'Iron pillar' would have been brought here from that place. The inscription refers to the Bahlikas of Sindhu who were apparently the same as mentioned in *Ramayana* in a territory adjacent to Vishnupada, not far from the confluence of Indus and its four tributaries, besides Sarasvati and Drishadvati.

We find that the 'Iron pillar' is in direct orientation axially with the central tall arch of the Qutb mosque and the entrance gate into the mosque. This is certainly not accidental and would seem to open a window on the mental working of the new builders, in so far as perspectives were concerned. We do not know if they tried to shift the pillar already lying here to its

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present situation or bring it here. The possibilities are, however, that, not having any idea of the nature of the record inscribed on it, if it was lying *in situ*, they might as well have advantageously allowed the erection of the 'Iron pillar' which, in any case, without its *garuda* capital, was not having any denominational Hindu character. This was appealing to them and was found fit for a location aligned to the central axis of the court-yard and the cloisters. Alternatively, if the cloister circuit was entirely a new reconstruction, out of old materials and completed probably during the time of Iltutmish, it was attuned with the position of the Iron pillar which may have been lying there. In either circumstance, it is a tribute to the art ken of the new builders and must, for its special context of being the very first Islamic mosque of India, speak a great deal about their diligent planning of architecture to have the best visual effect. The inner cloister in the first stage of the mosque was probably raised by Qutbuddin himself. In the second stage under Iltutmish, it had been completed and expanded further, and in the third stage under Allauddin Khilji, as already indicated, besides the further extension of the mosque area, ancillary constructions like the *madrasa* and the south gate or Alai Darwaza were erected. We do seem to have some further internal evidence for the first stage, in the form of a provision for reaching the front cloister roof, through corner flights of steps of an open kind with a gallery perhaps on the roof earlier, at this spot. This could mean that, at that stage, the Qutb Minar had *not* yet been envisaged for the very purpose the corner stairs might have been—for the *azan* call. The Qutb Minar, when it rose very soon thereafter, was only to replace, this earlier improvised usage in a magnificent manner. We may, however, place all these successive developments, namely, the first mosque layout with the 'Iron pillar' and the roof-top access and the inception of erection of the Qutb Minar, within the period of Qutbuddin Aibak, in the very first decade of the 13th century A.D. The pyramidal plaster-and-stone roof of the cloisters, now seen however, appear to be repairs typical of the time of the Tughluqs and we have indeed references in *Futuhat-i-Firuz Shahi* of his having repaired, amongst many other older monuments, the Jami Masjid also in several ways.

The second feature of importance is the erection of Iltutmish's tomb (Pl. VA & B) to the north-west corner of the mosque. This would show: (a) that Iltutmish, having been also associated with the expansion of the mosque and even the *Minar*, was much attached in a religious sense to it; (b) no finite traditions regarding the locations of mausolea for royal patrons or laiety has yet been seemingly formulated; for, otherwise, one should think that Iltutmish's grave was in a rather incongruous position and was virtually becoming a part of the rear premises of the mosque, especially since it was given access from the mosque layout. Later traditions make such mausolea the detached frontal adjuncts to the courtyard of a mosque (and not of its prayer chamber), especially for royalty, while the common people had, necessarily to be located outside the main inner enclosure of a mosque and preferably in one of the lateral corner of periphery; and (c) the prayer chamber was a cloister of double bay width and was not having any meaningful intercolumniation with the ceiling or roof and with the front screen arches—the raising of which was itself a formative stage in the mosque construction. At Ajmer, in the next finite stage, under Iltutmish, the facade screen has been integrated with the prayer hall (which itself was of

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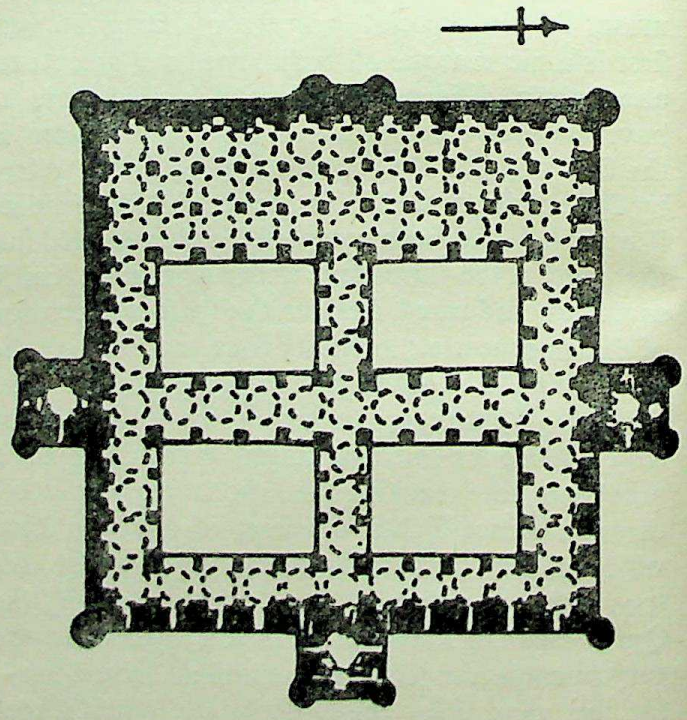
11. *Kalan Masjid, Nizamuddin, Delhi*

multiple bays and of lofty ceiling there) besides providing for hidden stairway-*cum-minar* buttress on the front, for access to the roof for the *muezzin* and was thus pregnant with advanced designing. The Delhi mosque is, thus, the highly tentative version of a mosque pattern, seemingly eked out of a pre-existing analogy (or even a ruined actuality at the site) of the cloistered circuit of an indigenous temple as shown by its plinth exterior. Its height was also that of a normal single storey height, whereas at Ajmer, the prayer chamber itself had been raised to a double of the single storey height on stilted pillars, giving it an impressive inner volume in voids. It may, however, be noticed that keeping the prayer hall only at a single storey height was not necessarily an early feature, because even in the Tughlaq period, we find a very large mosque, like the Kalan Masjid (fig. 11), where almost the entire area except for a central point (where seemingly the ablution tank existed) had been very low roofed and this arrangement had brought other problems such as of natural light, which had only been partly solved by similar skylight courtyards at four other diagonal sectors of the roof area. The reason may largely be that for the prayers, where often one has to kneel down, again and again, the main outlook was at best only at eye level. Further, only in Rajasthani or Gujarati mosque as in the Jami Masjid at Cambay, we have very high ceilings—largely inspired by the indigenous temple design there. This may not have held good at Delhi, where even temples of the 12th-13th century A.D. have been having reasonably low cloister roofs. Nevertheless, the rather narrow cloister of Qutb mosque which was a Jami Masjid is clearly indicative of the stern, simple and functionally rudimentary layout design of this earliest creation under the Sultanate.



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Imperial and Provincial (or Regional ?)

It has been customary to divide the periods of Islamic architecture into three stages; Imperial, Provincial and Mughal. It could be seen that this does not really do justice to the character of the works, from an art-historical point of view. Nor does it reflect the spectrum of growth of the Islamic power in India which spearheaded the architectural style appropriate to its *ethos*. At the outset, it should be stated that already by the 11th century A.D. a large part of what is today Pakistan (namely Sind and West Punjab) had been occupied by the Arab and Ghaznavid chieftains, under the pervasive influence of Iran and under the direct geographical link with Afganistan variously. With the disappearance of the Ghaznavids and their replacement by the Ghorids, Punjab actually became an outlier pocket of the Ghaznavid rule. At the time Mohammad Ghori conquered Delhi, humbling Prithviraj Chauhan this link was continuing, in much the same manner that Eastern Uttar Pradesh and Bengal, as at Jaunpur and Lakhnauti were nebulous oases of firm Islamic occupation linked tenuously with the Sultan at Delhi, and became the hot beds where, again and again, revolt or rebellion was fomented. Further, the historians of the period themselves seem to distinguish Hindustan from the other areas to the west and north of Delhi (such as Sind and Punjab) where Islamic rule under one group or another, whether Ghaznavid or Ghorid, was extant, *already* from the 10th century A.D., if not earlier, and these historians designated only the areas to the east and south of Delhi empire including the Ganga-Yamuna *doab* and the whole Ganga valley and the Deccan as Hindustan. Thus, Ajmer and Delhi became entrenched appendages to Multan, Lahore and Sind which were integral parts of a pre-existing Islamic socio-political *melange*, and the *doab* and the Ganga plain on the one side and Malwa, Deccan and Malabar on the other side, were deemed as the areas legitimately to be designated as Hindustan whereby they were simply meaning the area where Hinduism was then an extensively permeated usage in religion.[1] The area between Peshawar and the sea and from Seistan to China was called 'Hind' according to *Taj-ul-Maasir*, while Hindustan was what was further beyond Delhi to the south and east.

It could be seen that the fight for Hindustan was essentially a fight between the Afghans and the Mughals. For a long time, the conquerer of Delhi and the kings to sit on its throne had been Afghans—first of the Ghaznavids and the Ghorids and then the Khiljis and Tughlaqs—and later the Sayyids and Lodhis were after the Turks and Mughals. In the years after the Mughal power establishment under Babar, his successor Humayun was worsted and temporarly ousted by Sher Shah Sur who was primarily an Afghan and who built himself up from a hinterland chieftainship in Bihar by which both Bengal and a good

1. "The following are the most celebrated cities and tracts which lie between Khurasan and Hindustan, according to the testimony of eye witnesses. After crossing the Panjab or five rivers, namely Sind, Jelum, the river of Lahaur, Satluj and Biyah, there are the Basaun of the Jud hills Sodra, Jalundhur, the Kokar country, Multan Uchh, Jasi, Sarsuti, Kaithal, Sonam, Tabar hind, Banadri, Samana, Hajnis, Kohramand Nagor.
Bahrah (on Jehlum) was on the borders of Hindustan and was near at hand. . . . ."

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part of upper and central India around Delhi came under his control. Thus, we would be able to see that the styles of constructions erected by the Afghans and the Mughals respectively had also to differ visually, although not stylistically. We see in the former, an element of structural conservatism, lack of non-traditional ornamentation and avoidance of over much of either sandstone or marble as a raw material, though these were often used for Quoranic calligraphy on their mosques and certain occasional decorations in bands, for window frames and *mihrabs*. But with the Mughals, it is exactly the opposite, their architecture was comprehensive and highly aesthetic, the use of sandstone and marble profuse and with a clear understanding of their ultimate effect; and the construction programmes were covering a vast series of buildings for secular and religious purposes. The Mughals, further, though religious in themselves, did not allow any ecclesiastical overlordship of their imperial powers and had kept in check the strangle hold of the clergy. They had also an earnest desire to establish cities which were indeed not oppressively fortified, as under the earlier regimes, but were orderly layouts of civic spaciousness and amenities. They had further introduced the garden art which was indeed a special trait of their aesthetic and ornamental craftsmenship and art dimensions and were primarily for inner and private enjoyment—an index of their high urbanity and court-life and predilections of relaxation which were indeed equally personal. The earlier Islamic phases witness kings and princes continuously indulging in sensuous pastimes, leaving the rigours of rulerships usually in the hands of crafty courtiers and religious zealots. The kings themselves did not lead any religious programmes, notwithstanding the interest in raising structures pompously enough by way of dimensions, including planning for their own mausolea. Kings like Firuz Shah did not appear every day. Even then, they could not compare with the mausolea or structures of the Mughals, as of Humayun, Akbar, Jehangir and Shah Jehan. It could be said that the pre-Mughals cared for limited management of building resources. Only under Firuz Shah a spectacle was seen of imaginative and verstatile planning which had left us not only several important structures but also indices of the diversified interest of the King, but this penchant was frittered away by the rulers, in general. Further the mausolea and buildings of the pre-Mughal kings were often ill-planned, devoid of environmental harmony and were, by and large, an adventitious placement without any overall eye for planning with reference to their own citadels and the cites of their times. In the sequel, we may largely consider the pre-Mughal structural architecture as a *congeries* of parts, with only a basic and traditional *regimen* for individual plans and elevations. They also did not integrate the tomb and the mosque. This, for the first time, is fleetingly seen under the Lodhis (as in the Lodhi tomb group) and it is clearly an index of the times but was particularly excelled in by the Mughals.

Even in the peripheral regional styles, we see that whether at Jaunpur or Bengal, there was no lineal development of the structural complex, leading to a gradual structural *milieu*. Both raw material and design were essentially repetitive and stylized. On the other hand, the only two areas where construction was informed truly by an inner urge of the artisan for self expression in various directions, were of the Sultanate of Gujarat and the Adil Shahis of Bijapur. All the other kingdoms mostly followed the prevailing trends

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in construction and delineation. Thus, we may also consider that variegation of both volume and visual design was first practised by the Mughals in which, apart from stone material, equal felicity in plaster and stucco work and particularly inlay was deliberately but in harmonious proportions practised. We may thus be entitled to consider the pre-Mughal architecture as traditional, discrete, and patternised, whereas the Mughal architecture was complicated integrated and variegated, with a conscious affiliation of both structural principles and design-potential. Even in the method of laying out their structures, whether single or more than single storey level—which latter was relatively less common—the Mughal approach was to seek out a symmetry, a balance between solids and voids, rather than a mere utilitarian arrangement, often matching dimensions and convenience with the large-sized dimensions of the main complex of which these were to be an adjunct. The use of the *mass*, again, substantially and intrinsically, differed between the pre-Mughal and Mughal times except in Gujarat, Bengal and Bahmanid and post-Bahmanid Deccan. The totality of inarticulate clustering of bastions on the main structures in the pre-Mughal phase is a pointer. It could not be that the local artisan whom they employed were unequal to the task, but the orders given to them did not extend to any unfettered use of imaginative designing and this restricted them to defence-style constructional bias, wherein the 'ethos' of the craftsmen did not have adequate play. When we see the extraordinarily large number of stone cutters and artisans that Babar had recorded as employed for his imperial palaces and other structures, we would see that the full and free scope for artisans to put forth their best and a conscious involvement in construction, designing and layout was more than made apparent. The city and citadel layout under the Mughals was an exercise in craft, wizardry and sumptousness where the visual beauty of its ornamentation was to be the symptom of the inner satisfaction and confidence of the patrons to order their structures in the best means and manner at the their disposal. A comparison between the layout of the Sultanate or the Khilji or the Tughlaq (except briefly under Firuz) rulers would thus be a picturesque contrast to that of the Mughal.

Thus, when we are talking about Islamic architecture in India (Hindustan), we are indeed implying with a precocious historical intuition, the exclusion of the areas now virtually falling beyond the present day post-partition India and that is why the battle of Tarain and Ghori victory against the Rajputs is taken by historians as tne starting point of Islamic India—in so far as non-Islamic parts of the then existing India are concerned, notwithstanding the fact that Sind and Punjab till the 7th century A.D. were under the full and pervasive influence of Hinduism and even after continued to have Hindu citizens. By the same token, we are entitled to consider the areas of Punjab and Sind as forming the notional cock-pit and patrimony from which a non-indigenous formal inspiration for the architecture of the Sultanate of Delhi (and indeed for the succeeding dynasties also) had itself been drawn and derived, right from the period of inception of these Islamic architectural activities in Delhi, for the purpose of our study. It is interesting also to note that these areas, especially Punjab and the present day Haryana—as at Narnaul in its Shah Vilayat Dargah (*c.* 1137)—had furthered an architectural spectrum, much ahead of the

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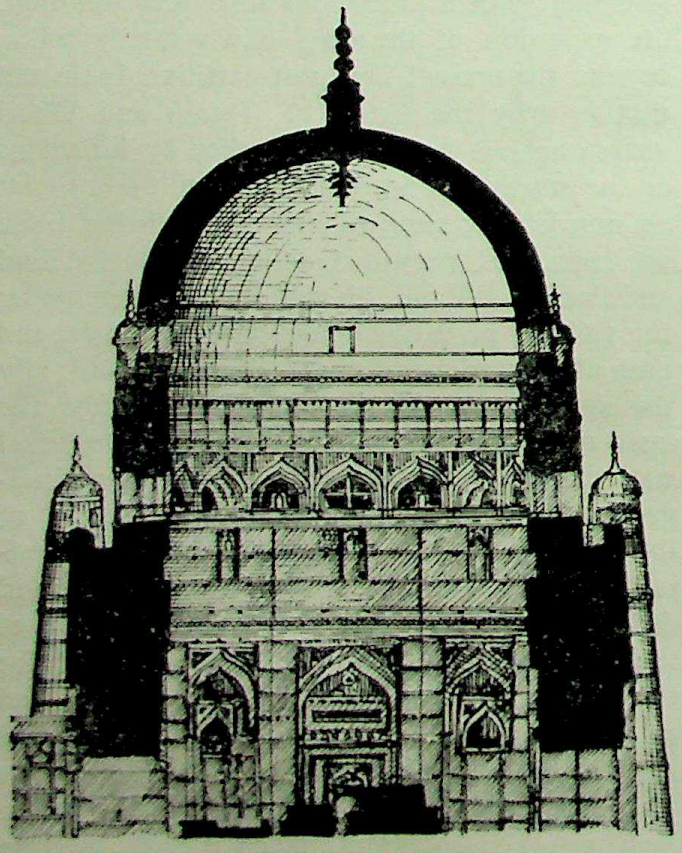
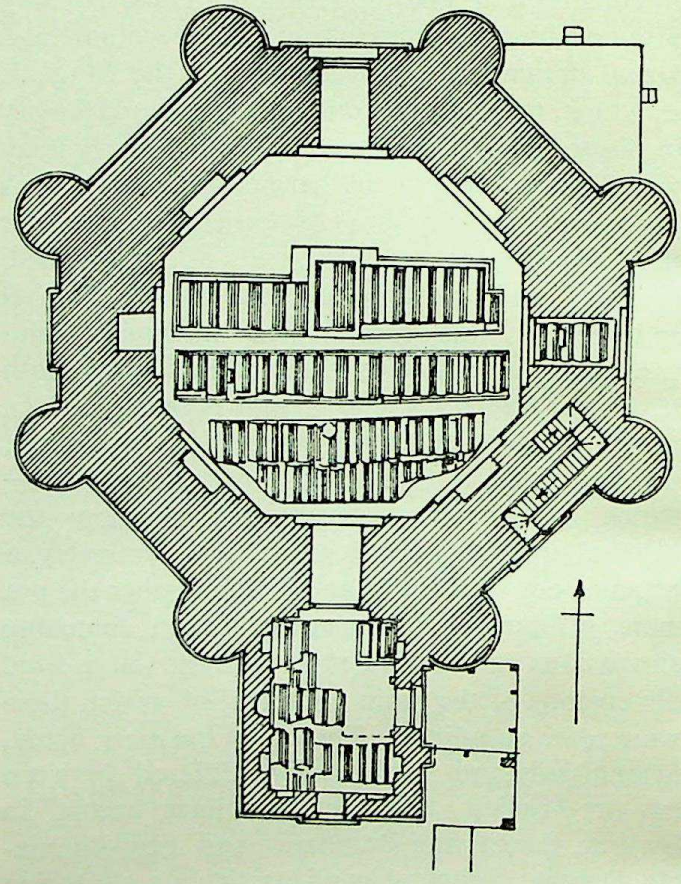
12a. *Cross Section of Tomb of Hazrat Shah Rukn-e-Alam Multan*

12b. *Ground plan of the tomb of Hazrat Shah Rukn-e-Alam Multan*

Sultanate of Delhi and partly overlapping with it (between 1150 and 1320 A.D.) but in a manner which combined the chief formative features of the Islamic style in India, though in an abridged or circumscribed manner. We should thus be well advised to exclude Punjab from being called a mere 'provincial' style, as had been considered by Brown, but rather deem it as the precursor *matrix* and reference plane of the art modulations of the Sultanate of Delhi in particular, and the dynasties that followed in Delhi and Agra. The





monuments that underscore this in the west Punjab are: Shah Yusuf Gardizi (*c.* 1150 A.D.—Pl.IV); the tomb of Shah Bahau'l Haq (*c.* 1262 A.D.—Pl. VII)—the tomb of the Shamsuddin Tabrizi

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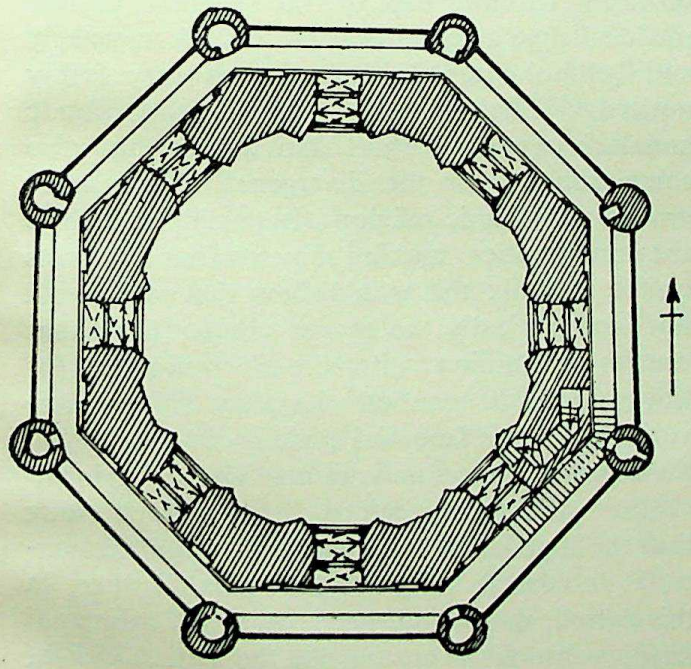
12c. *First storey plan of the tomb of Hazrat Shah Rukn-e-Alam, Multan*



(*c.* 1276 A.D.—Pl. VII); and the tomb of Rukn-e-Alam (*c.* 1320 A.D.—fig. 12a, b, c : and Pl. IX). The combined aspects of these four monuments, all at Multan, answer for almost every one of the significant early architectural pattern, formula, feature and elevational style, at least of the Sultanate, the Khilji, and upto the early Tughlaq monuments of Delhi. The rectangular Shah Yusuf maqbara (very rare among the Indian examples, but comparatively more extant then in Persia, decorated with a pilastered elevational frame carrying a large perforated rectangular ventilator frame above the arched facade the cross beams spanning the springing level of the arch and the projecting offset outside the western wall (where a *mihrab* is located inside); the wide triple-sectioned front screen of the tombs of Shah Bahau'l Haq carrying within a square basement, an octagonal upper base and circular squattened dome with a conspicuous drum; the provision of a basement supporting the basal square of the tomb, and the uppermost octagonal tomb chamber carrying on the floor the *taviz* and surrounded over the wall by a drum punctuated with high rectangular grilled ventilators below the squattish dome (as in Tabrizi's tomb); the battlemented, turreted and batter-walled octagonal enclosure (as in Rukn-e-Alam's tomb) similar to that in Khirki or Kalan Masjid of Delhi, close upon the octagonal walls and hemispherical dome (which last feature was perhaps a renovation of the Mughal times in the early 17th century A.D., as seen from its classic dome profile almost similar to Humayun tomb or the Taj), a skirting barbicon-like cover for the entrance into the battlemented enclosure—also perhaps a late Mughal accretion; all these summarise the elements which became successively popular in Khilji, Tughlaq

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and even early Mughal times in Delhi. It is interesting that *kashi* work of tiling originally from Kashan (Persia), had been an early feature of many of these monuments and perhaps was employed in many of the early palaces at Delhi also in the Sultanate and Khilji times themselves, especially since we find, the palaces named as White palace, Red palace(Kushki-lal, as at Kilokheri or Lal Kot) Green palace, etc., in those times in Delhi, according to the contemporary chronicles, perhaps from the tile work. It is obvious that only the interior walls were invariably plastered, as in some cases references to paintings having been executed, as at Kotla Firuz Shah palaces, are also found in the accounts of *Futuhat-i-Firuz Shahi*. The wide screened entrance of Bahau'l Huq's tomb at Multan was clearly again the analogue to the developed Buland Darwaza type of either Sikandra tomb entrance, Fatehpur Sikri or Humayun's tomb where, however, it has splayed (or semi-octagon) side parts, in its three-parts spread. It is equally obvious that the rest of the tombs in square—mounted on—octagonal elevation was mainly to gain a prominent setting on the plains of the Punjab which would not have natural elevational setting, but this has been copied even in Delhi in Ghiasuddin Tughlaq's tomb where a natural elevation was even otherwise readily available by the hillock and the plateau nature of the terrain. This only shows that, at that stage, the emulation of the Multan model was considered more important than a due consideration of the immediate environment of the terrain and geographical advantage of a particular monument in Delhi, emphasizing thereby how much inspirational antecedent importance the Multan centre was given, in the assessment of the constructional features of the tombs by the Tughlaqs.

It is also seen correspondingly that in areas where the Sultanate links and those of Khiljis and the Tughlaqs existed, as at Jaunpur, in Bengal and Central India (more particularly at Burhanpur than at Mandu where the Tughlaq style was under loan directly to the local Khilji line) there had been no inclination to be obliged to the Delhi style as the *chief* source of inspiration, but rather through a regional *vogue* only marginally integrating other elements from Delhi with the local style. In the Bahmanid area of Deccan, where Islam spread itself from about the 13th century A.D. onwards till the end of the Mughal period, the local style asserts itself even more markedly and Delhi or Mughal inspiration is very feebly noticed. While the basic schism in the Islamic annals between the Shias and Sunnis has also some grounds for the divergence of the *ethos* among the Islamic religious leadership as well as the communities, making some profound impacts on the outlook, this would show that we should not mechanically categorise these important centres of Islamic architecture as 'provincial' for this term would connote that they form a mere variation of the Imperial style on a lower key in these power centres and are not viable 'regional' centres—which they indeed were—more meriting thus the appellation 'regional' rather than 'provincial'. In Islamic religious activities, further, in this period, there had been other great internal schisms among the groups like the Turk, Afghan, Persian, Mughal, and local chieftains who had become converts to Islam tended to accentuate this all the more. Hence, it would be appropriate to consider even the movement of religion as well as the monument construction as not having been a concerted and uniform imposition, being rather the thrusts, from time to time, for self-glorification along with the glorification of religion

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by ecclesiastical leaders and military subordinates to the chieftains. These bodies, besides, had clear limitations of aesthetic taste in organizing the building work and had to depend heavily upon indigenous and exotic craftsmen and were unable to control the art-outlook of these craftsmen, except to the extent that the art had to be furthered. Temporal vicissitudes often proved uncongenial even for this. The Afghan invaders did not have any well-moulded traditions built up, at the time they entered India, because the purpose of the expansionist kings like Ghazni and Ghori then was not to stimulate a fruitful interaction in art or culture, but only to exploit the resources of the country and to expand the area of power and the sword arm of Islam. We realise that even such a versatile and imaginative king like Firuz Shah Tughlaq could not reconcile himself, with equanimity, to the continuance of Hindu idolatry by that section of the people and was rigorously stifling the existence of Hindu religious usages in the Delhi area by imposts and severe punishment. It is only from the time of the Mughals that we have true aesthetic principles of construction receiving the systematic personal attention of kings and a certain catholicism of outlook prevailing in the appreciation of the deep-rooted traditions of the Indian soil. Upto 1500 A.D., the powers ruling Delhi—who also did build considerably and some of great dignity—could not make common cause with even other chieftains of their own religious persuasion. In that respect, it would be true to say that the 'regional' styles, such as of the Gujarat, Bengal and Deccan were more fundamental local developments receiving impetus from source both local and extra-Indian directly, in construction, and their own repertory allows comparison and contrast with that of the activities in and around Delhi between 1200-1500. The study of the variations would be highly valuable, in the examination of the issue whether these carried any seeds for organic linear growth of Islamic building art.

We observe that traditional layout of the mosque had been primarily adhered to without too much of a change, and only structural principles and the external embellishments were the hall mark of the local genius, In this regard, surface ornamentation became the chief obsession of the Gujarat Sultanate style, due to centuries of experience in sandstone, and in Bengal, due to the great pre- and early medieval centres of terracotta art and craft in the region, and both are largely indigenous offshoots tailored to the Islamic circumstance. Deccan breaks indeed new grounds and is able to cater to the foundational principles of Islamic architecture on domes, arches, intercolumniation, and organization of solids and voids in a purposeful manner and thus Deccani Islamic style, till the advent of Shah Jehan, had represented itself as the most outstanding innovator and practitioner of a brick-and-stone based Islamic building style. In the time of Akbar, a new movement for an unabashed and picturesque integration of truly Hindu craft and constructional potential into Islamic building modes became widely prevalent. For the onward evolutionary growth of Islamic religious art, this may indeed be deemed as resulting in a retardation effect on the truly organic progress of Islamic architecture. Even during this time, Deccan was comparatively free from any such adventitious admixture or conglomeration. It is Shah Jehan's period that again brought back Islamic architecture to its natural evolutionary developmental groove and was perhaps the most

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comprehensive and satisfying stage of Islamic art. A wholesale non-indigenous flavour is noticed then in building and ornamental style only in this period spread fairly all over a large part of India, including even the deeply entrenched regional centres as in Gujarat, Bengal and Central India. To some extent, a mutual osmosis also was seen in this. The tone and tenor of a truly Imperial court style is for the first time experienced in the structures, whether of mosques or tombs or even residential architecture—a feature noticed alike in painted miniatures and minor crafts as well. In fact, a whole *volte face* in constructional preferences, especially for secular structures, takes place from this period and there is no palace in India built between 1600-1800 A.D. which is not truly indebted substanitially for plan, elevation as well as embellishments to the Imperial Mughal mannerisms. This trend is broken only by the superseding and contending Imperial Western colonial power, such as of the British, which brought totally new concepts of civic living, hygiene and residential plan, apart from the other frills and flounces of their alien style which were largely drawn from the Graeco-Roman traditions of Europe. This was, however, totally able to break the monopoly of the Mughal traditions in art and architecture, and the colonial era was, therefore, the era of supplantation of Islamic tradition, culture and outlook for good, much more than for Hinduism because secular constructions and models had a greater play in Islamic than in Hindu style which latter was having its art-focus mainly on its temples and not on public buildings. No more can we see ostentatious craftsmanship in sandstone, no more the non-functional enrichment of detailed carvings in building, and no more is the broken skyline of the buildings harmonised in their parts to be met with. Construction in the colonial era was judged by its stolidity, surface monotones and functional division of parts. Tradition truly was replaced by modernity.

City and the structures

The development of the city of Delhi is fundamentally distinctive from the usual growth of civic, metropolitan or urban movements noticed in other parts of India. Here, across the centuries from the 13th to the early 16th century A.D. there was political drama of the glorious as well as gory character; there was fever and tension in every decade, there was a certain degree of opportunist intrepidness and impulsive distrust of the 'establishment' and often a total lack of commitment to 'settled conditions'. In fact, it would seem from the chronicles of the contemporary historians that prolonged prevalence of peace was scorned against, as something deserving to be upset, both because of the support it gave to the royal or religious patrons who contrived it, as because of the need to stifle the vaulting ambition that existed among the several contenders to the high offices. While their assured strength was there to fall back upon, the lure of filthy lucre was so great that the tide was turned by a craftly use of it, as by Allauddin Khilji. The position that existed was paradoxical as it was committed as much to a continuity of rulership as to the need to cut it asunder brutally, from time to time. Leadership of the court was only for the most resourceful whose services could be made available to the best royal or other bidder, by insurrection or supplication. The disorder that prevailed, whenever a clash took place between pleasure-loving kings and Machiavellian courtiers, was only matched by the utter orderliness with which a suitable succession was clamped to the

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throne—again to run the gamut of likes and dislikes of the men around; again to taste the powers of life and death over individuals by an oral writ, and again to find joy in shortlived splendour and dissipation. The alacrity with which the economic well-being of the city and country switched on from blessed prosperity and standardization of tariffs and prices in an inexorable response to the stern command of the temporary king, to total disarticulation and soaring price spiral, soon after the fall of a king or rise of an imbecile puppet, was something amazing. It was like ruling in the 20th century with the garb and paraphernalia of medieval conventionalism. Monarchy was no myth (as in the Indian tradition) and was as unstable as the summer fashions of Paris, but anarchy was never permitted to flourish. The king was a mascot around which the political and religious powers had to revolve and operate, and thus a negotiable king must be quickly found, preferably in easy dynastic or hierarchic succession and not necessarily of the blue blood, and even if he was a mere child or a tottering old man.

In such a situation, the development of the capital city was not so much arising out of geographical or environmental or civic need, but a political strategy to highlight the stamina of the ruler. The first of the Delhis, under the Slave Sultans had to supplant the moribund Rajput Hindu power ruling from within the walls of Qila Rai Pithora and thus was inexorably committed to locating itself within the same walls attuned to a new 'order' and not yet ready for imaginative urban or palace layout, and making do with improvisations in the Lal Kot enclave. Once settled, they were able to rule in peace for hardly half a century, when political tension appeared from the time of Sultan Razia and, in the aftermath and the arrival of Balban, saw the first non-Slave ruler ruthlessly bent on order and enforcing it sternly. It was even perhaps the best of times economically, as it was the worst of times politically. When it yielded place to the Khiljis, Delhi went into tantrums once more until Allauddin's long reign brought again a leader of the Balban stamp, but ethnically different. The Khilji writ was to be in due course terminated to give place to the Tughlaqs, under Ghiyasuddin and his parricide son Mohammad-bin-Tughlaq; and order was restored, after a catastrophic quarter century of the latter, under Firuz Shah Tughluq, and when this passed away, the times were indeed again disastrous under the Sayyids and Lodhis, with constant ups and downs until the Mughals appeared on the scene. In between, the turn of the 15th century A.D. saw the cataclysmic inroads of Timur, crashing into the Delhi plains like a plague and destroying order. In this total period of two and a half centuries (between 1280 A.D. of of Balban and 1526—the first battle of Panipat) the capital and the citadel of the king were shifted from the initial Qila Rai Pithora, as many as five times, variously to Kilughari, Siri, Tughlaqabad, Jahanpanah and Kotla Firoz Shah in Firuzabad. The first was the summer moonshine of Sultan Muizzud-din-Kaikobad (grandson of Balban through one of his younger sons, Bughra Khan of Lakhnauti) who ruled for three years and is now lying east of Jahanpanah destroyed; the second, the Siri fort raised in the face of Timurid invasion, and thus more a logistic move to bring the royal seat into the plains; the third at Tughlaqabad, a magnificent show of the rise of Tughlaqs and taking the capital back to the rugged hills on the Mehrauli-Badarpur stretch. The fourth, Jahanpanah, so typical of Muhammad

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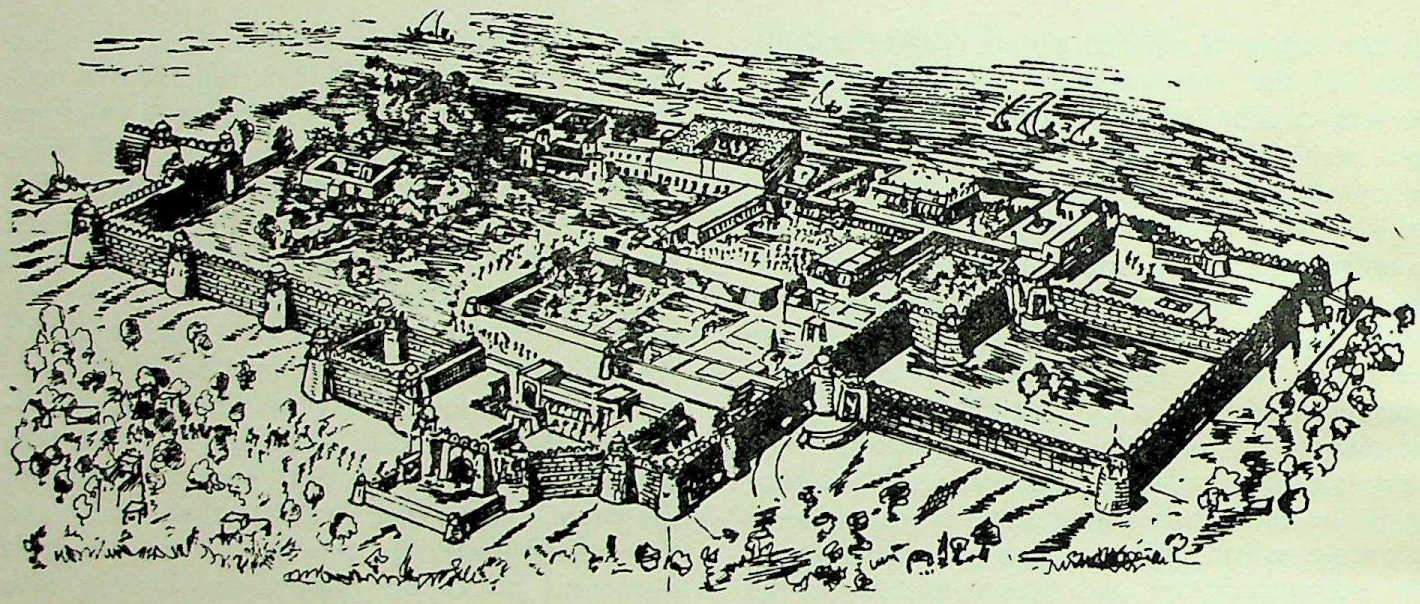
13. *Kotla Firoz Shah, Delhi, conjectural reconstruction (after A.S.I.)*



bin-Tughlaq—a desire for a change from 'accursed' Tughlaqabad and putting it between Qila Rai Pithora and Siri, by linking both. The fifth--Firozabad—alone is the metropolis organised for the first time under Firuz Shah, with a well-planned citadel on the Yamuna, and was a city not covered by any firm outer fortification but rather by civic unification and easy communication, from Hauz Khas to the latter day Shahjahanabad, having eighteen suburbs, including the 'Kasba of Inderpat, Sarai of Shah Malik Yar Paran, Sarai of Sheikh Abu Bakr Tusi, the village of Govin, land of Khetvara, the land of Lahrawat (around Hauz-i-Alai) the land of the Sarai of Malika, the land of the tomb of Sultan Razia, the land of the Bhari, the land Mahrola (Mehrauli?) and the land of Sultanpur (Sultan Ghari?)'. The surrounding rocky ridges and scrub jungle were dotted with *Shikargah-Kushks* and there were eight public mosques and one private mosque, the former having provision for accomodating 10,000 supplicants each, according to Firuz Shah. Here was the first organized *city without fort walls*, but with a grand inner citadel (Kotla Firoz Shah). For the first time, after the Qila Rai Pithora and Tughlaqabad, peace reigned. When this was disturbed again seriously, Mubarak Shah Sayyid attempted a disastrous Kotla Mubarakpur in the area adjacent to Inderpat—ill-fated from the start and containing the tomb of the Sultan now; and the succeeding Lodhis had hardly any time for raising a city of their own in Delhi area. They had seemingly used Kotla Mubarakpur itself (as seen from the nearness of their monuments to this place). The ravages caused by all these vicissitudes must have prevailed upon Babar to go down stream and have his capital at Agra.

While the layout of the city was thus consisting of the royal citadel (fig. 13) with palaces, of which

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Firuz Shah had four different ones, Mahal-i-Sehan-i-Gilin (the palace of clayey courtyard) Mahal-i-dikh (the palace of grapes), Mahal-i-Chajja-i-chobin and Mahal-i-Badi amm (palace of public court and also called Sahn-i-Miyanagi): he also built other cities like Fathbad and Hisar Firoza at Hissar. At the present city of Jaunpur, before him, there was no city of any extent, but only a small town and in a suitable site selected by him on the banks of Kowah (Gomti) in six months of personal stay and supervision of the Sultan, a large town was built. At Hissar-i-Firoza, he brought hard stone from the hills of Harsai and using it with strong quick lime and burnt bricks, he constructed the fort with ditches all around and with battlements. Inside the fort, a large deep tank was formed, the water of which ran into the ditch and was replenished year by year. Inside the fort, a palace with certain unique arrangements was built with an underground chamber layout where a person entering it and knowing the layout will arrive at the centre of the zone, after passing through several apartments. This central apartment was having dark passages, and it was difficult to find one's way in or out of them, if one is ignorant of the layout. It is clear that the Sultan was quite aware of the cliques and treachery around and was providing against any sudden organised attack on his person and those of his near ones, as the circumstances around his own ascendancy to the throne reveal. It is interesting that even in his tomb on the Hauz-i-Alai bank, he provided for re-entrant bafflewalls within the entrance passage, where any surprise onslaught could be watched, before it was hatched. All this shows that the Sultan carefully studied the historical changes which took place before him where, royalty was often subjected to conspiracy and attempts on life for putting an end to their rule, by ambitious courtiers and executed by mercenary armed bands. It is equally obvious that in making plans for these in the palaces and with strong battlemented and ditched forts, he was leading the way, for a stable, peaceful reign and implemented these with a single-minded design and purpose, which resulted in his reign of nearly thirty-seven years as the most eventful among the pre-Mughal political life of the country. His historians name several such palaces at Firoz, Nuzul, Mahadvari, Hisar Firoza, Fathbad and Jaunpur, besides *Shikargahs*, one among which on the ridge had two unique features, namely, the erection of Aśoka's *lat* in front (brought thither from Meerut by a well-planned riverine journey in boats) and the *Tas-i-Gharial* (the clock with seven different uses) for working out time and making known the hours of prayer. It was placed on the top of the *darbar* of Kushak here. This latter was obviously a reference to the sundial engraved on a sandstone slab and seemingly with metallic limbs orginally, which is even now found in his *Shikargah* on the ridge, just by the side of the structure known as the *Maqbara* of Pirghaib. The ridge was clearly part of the Firozabad limits. The chief architect of Firuz was Malik Ghazi Shahna, who designed and planned his palaces, baths (as at Fathbad), Malja with ab-i-Zamzam, Mahpalpur, Shikarkhan, Salaura, and Wazirabad—the last of which even now has a mosque existing nearby to proclaim his irrigation and waterworks interest. He ordered that the *Divan-i-Wazarat* (the financial officer) examine the plan of every proposed building and made provision so that work should not be stopped for want of funds. It is further interesting to note that painting of portraits in private apartments of kings was prohibited by him by law and the Sultan suggested that garden scenes should be painted instead. This shows that

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such a practice of painting portraits existed in pre-Firuz times, and the king, true to his deep adherence to Islamic laws, frowned on them.

Repairs and Renovations

Firuz Shah, as is now well known, was the first king also to launch upon large scale and extensive renovations and repairs to earlier tombs, mosques, etc. He gives a formidable list in *Futuhat-i-Firuz Shahi* of this. This included the western wall of the tomb of Sultan Muizuddin Sam (master of Qutbuddin Aibak) where old planks of the door at ground level and in the gallery were replaced by doors and arches in ornamented sandal wood. The *minar* of Sultan Muizuddin Sam, struck by lightning, he repaired and raised it higher than it was. Hauz-i-Shamsi or the tank of Iltutmish was desilted and old channels were exposed. *Madrasa* of Sultan Shamsuddin (Iltutmish) which was destroyed was furnished with sandal wood doors. He observed that when the tomb of Sultan Iltutmish was built, its court (*sehn*) had not been made curved (*Kaj*) but he now made it so. He enlarged the hewn-stone staircase of the dome and re-erected the fallen piers (*pushti*) of the four towers. We shall comment on these later, with the help of Cunningham's intuitive deductions on them which stand proven now. The Sultan informs that he re-erected also the enclosure wall, terrace and dome of the tomb of Sultan Muizuddin Sam and Iltutmish. Repairs to Jalaluddin's and Allauddin's tomb were made. The wall of Abdar-khana, west wall of mosque with colleges, were provided with tessellated pavements (*Farshi-tarshib*). He also restored the foundation of the fort wall of Jahanpanah, built during the time of Mohammad Tughlaq Shah. At Hauz Khas or Hauz-i-Alai, Firuz Shah used *gach* (cement) in providing the facings to the structures and drains.

Old Delhi (Qila Rai Pithora) had ten gates, while Jahanpanah (flg. 14) had thirteen, seven on south side and six on the north side; Siri had seven gates, four towards outside and three on inside, towards Jahanpanah, We find that *Malfuzat-i-Timuri* refers to the existence of an Idgah in front of Siri which Timur made his main seat or hall of audience while dealing with the persons who had been given short shrift after his conquest. The important palace Chazr-i-Hazar-Sithun was chronicled as having been built by Malik Junah (Mohammad-bin-Tughlaq) in the city of Jahanpanah. At that time, and even before him during the reign of Qutbuddin, successor of Allauddin in 1317, the old fort (Qila Rai Pithora) had postern gates (*dar-i-Chak* which were kept locked at night and keys were not handed over to any one without Sultan's knowledge) with certain lower apartments within the gate and nearby for the meeting of officials and soldiers, while the regular living apartments of the king existed at the upper level. It is by the misuse of the keys that this king was attacked by Parwaris and other soldiers and killed in his own room. The palace of Siri, finished before 1309 A.D., had Badaun Gate, Ghazni Gate, Bhandar Kali Gate, the Red Palace (Kushkilal) and a gate leading to Kilughari, built by Kaikobad where a palace (Green Palace) was embellished with paintings and with a splendid garden in front and had also a *chabutra* called Chabutra-i-Nasiri (or Chautra Nasira, which *Tarikhi-i-Alai* also mentions already as provided by him, with a black pavilion, 'like the *Ka'ba* in the navel of the earth').

Construction and style

While reviewing the mosque and tomb types of the pre-Mughal period, we may note certain significant aspects of : (a) construction and (b) style.

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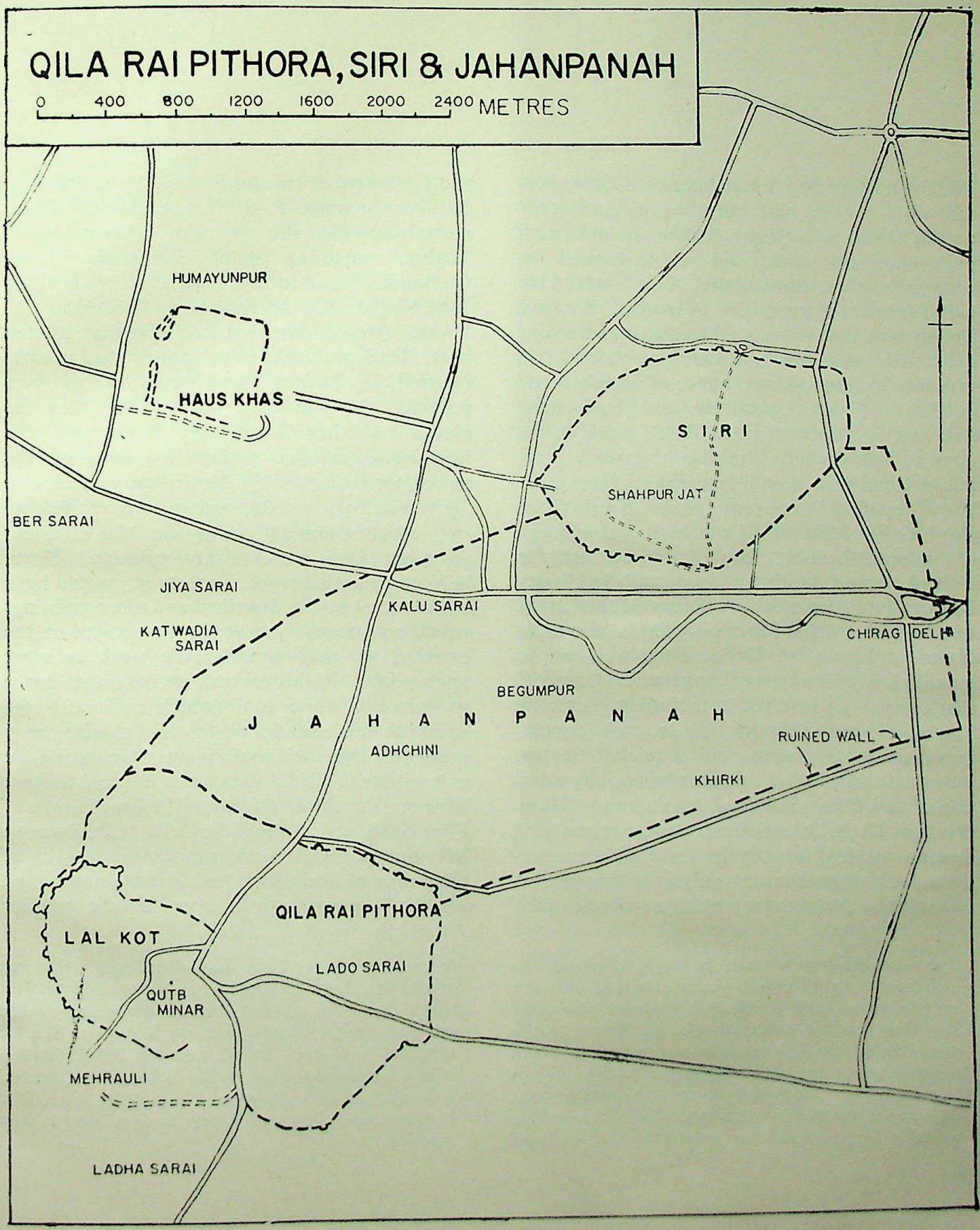
14. *Jahanpanah,, in relation to Qila Rai Pithora and Siri Forts*



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While sandstone had indeed been used, interspersed with marble, and burnt brick used (only outside Delhi as at Hissar, Lakhnauti and Jaunpur), undressed stones and rubble formed the main materials in construction. This involved the use of substantial quantities of mortar. We have already seen that words *gach* (cement) and strong quick lime and burnt bricks have been used variously in Hauz-i-khas, bunds of channels and in Hissari-i-Firoza respectively, and 'hewn-stone stair case' in respect of Firuz Shah's repair to the dome of Shamsuddin Iltutmish (by which only Sultan Ghari was actually meant) has been used. Use of tessellated pavement (*Farsh-i-Tarshib*) has also been recorded for the west wall of the college of Sultan Allauddin. Use of dug up earth for embankment of the ditch and side walls in Hissar-i-Firoza is also recorded. A 'Palace of the Clayey quadrangle' (Mahal-i-Sahan-i-gilin) is also mentioned in Firuzabad Delhi. Thus we seem to have an idea of the type of constructional material that were mostly involved in the buildings erected. The mortar was of quick lime or *gach* (cement) by which word perhaps only quick lime was intended, and whether by burnt bricks, any addition of *surkhi* was intended, we do know. However, it is likely that brick pieces were mixed with lime, as we find actually in these old constructions. Perhaps *gach* meant only finer lime plaster for making ornamental sandstone or marble or for that matter pavement stones also, to be stuck to the floors or walls. If so, we do realise that ornamental slabs like the one with 'inscriptions of Toghra, containing divine commands' which Qutbuddin is said to have covered the walls of his Jami Masjid with, as recorded in *Tajul-Maasir* of Nizami, would have been stuck like that, as seen now. Thus, we have both mortar and plaster, referred to, besides 'hewn-stones' which were perhaps laid with only '*gach*' in between the blocks and these hewn-stones would have been fully dressed and laid without too much of gaps among their courses. We have already referred to the 'White palace', 'Red palace,' 'Green Palace' etc., which seemingly convey the idea of either tile work (*Kashi* work) or mere painting.[1] Since, however, painting work, if executed, would have been at least briefly described and since paintings would not normally have been executed on the exterior, we may consider tile work as more appropriate. In this context, we have a reference to 'palace of white roof' which read with the names as aforementioned for the palaces, may mean only that their roofs alone were having the colour (due to tiled domes, etc.). We find that we have most of these references *before* the time of Firuz Shah, and during the reign of Firuz, we have but sparse tile work, (as seen in the ribs of the domes of Hauz Khas and Balban's tomb) and essentially plaster work, even for the exterior

1. The red palace, however, may be merely the reference to its location in Lal Kot which was an accretion, after the early Sultanate stage, to Qila Rai Pithora. While these early kings had their palaces in Qila Rai Pithora, by the time of Balban, the Lal Kot defensive enclosure had been completed, for a residential enclave in Qila Rai Pithora (seemingly where the palaces of the early Sultans stood), since we are told clearly that after Balban died, his body was taken from the Red Palace and buried in Dar-ul-Aman. Perhaps, the name of Lal Kot enclosure itself derives, out of the fact that a Red palace enclosure stood within it from the time of the early Sultans, and seemingly had painted or tiled red colour. It is unlikely that, like Lal Qila, it should have been a palace of red sandstone—though this not totally impossible—because had it been so, it would not have disappeared completely even after deliberate spoliation and some vestiges would have survived.

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surfaces of buildings. Hence, we may presume that it was primarily in the Sultanate and Khilji times that the tiling of the roofs, domes, etc., with coloured tiles was in vogue. This was also the time when links with the West Asian, Afgan areas were still maintained in the western part of India, (now in Pakistan) around Multan, as seen on the walls of Shah Yusuf Gardizi (*c.* 1150 A.D.) and thus this style of tiling went out of vogue when Firuz Shah consolidated his empire in Hindustan and brought a new simple scheme to his religious constructions. Thus we may note that, after the Slave and early Khilji periods, tile work is resumed again only in the Mughal period when Persian contact was directly available in a full-fledged manner.

New Trends

It is consistently seen in Sultanate, Khilji and early Tughlaq times, however, that marble lining for false-windows or Quoranic verses were employed in monuments, perhaps upto the time of Mohammad-bin-Tughlaq. We notice that this king has a great flair for poetry and philosophy and was himself a consummate calligraphist. We do not, however, have any example of his times carrying such a calligraphy bands in monuments. It is generally held that owing to the erratic nature of this king and several costly and futile experiments like shift of capital he conducted in political and economic policies, Delhi was in fact bereft of any craftsmen and this was the reason why Firuz Shah had necessarily to shift to coarse stone and plaster work. On the other hand, it would be more appropriate to consider that even during the time of Mohammad-bin-Tughlaq when Jahanpanah was created, we do not see any ornamentation in its area. It is very likely that the Tughlaqs, after the effort of Ghiyasuddin's tomb (which was more a copy of Rukhn-e-Alam's tomb at Multan and hence brought into play the sandstone and marble ornamentation), brought a shift in constructional techniques which was more attuned to massive and solid construction on an extensive scale, in the process of public works having been expanded considerably, and thus was a significant phase where visual and superficial aesthetic effects were valued less than gross expansion of structural works of lasting permanence. It is one of Firuz Shah's characteristics that buildings should be functional, which is clearly witnessed in his *Shikargahs* and even in the pyramidal structure inside Kotla Firuz Shah that he erected for 'Aśokan Lat', so that a stern dignity and strength is imparted to the constructions and non-functional ornamentation had been discouraged. In view of the heaviness of the Aśokan column and vertical stance, a pyramidal structural base was apt. In all the buildings he constructed after his style in the city he founded, namely, Jaunpur, we find the same style adopted, so that we may consider this vogue as essentially an Imperial preference between the last quarter of the 14th to the middle of the 15th century in the entire realm and is also an index of the period of large scale civic and religious constructions. What more, we may also consider a shift in emphasis of purely defensive or protective installations, in preference to public buildings, though largely on a religious side, but certainly including many other aspects of visual beauty and civic well-being, such as monuments like the pyramid for 'Aśokan lat' or the integration of Sun dial into structures for royal sport, like the *Shikargahs*. That the king should find time for sport amidst his admittedly organised and active rule not only bespeaks the man, but also the impact it should have created on the populace, albeit essentially on the Islamic gentry.

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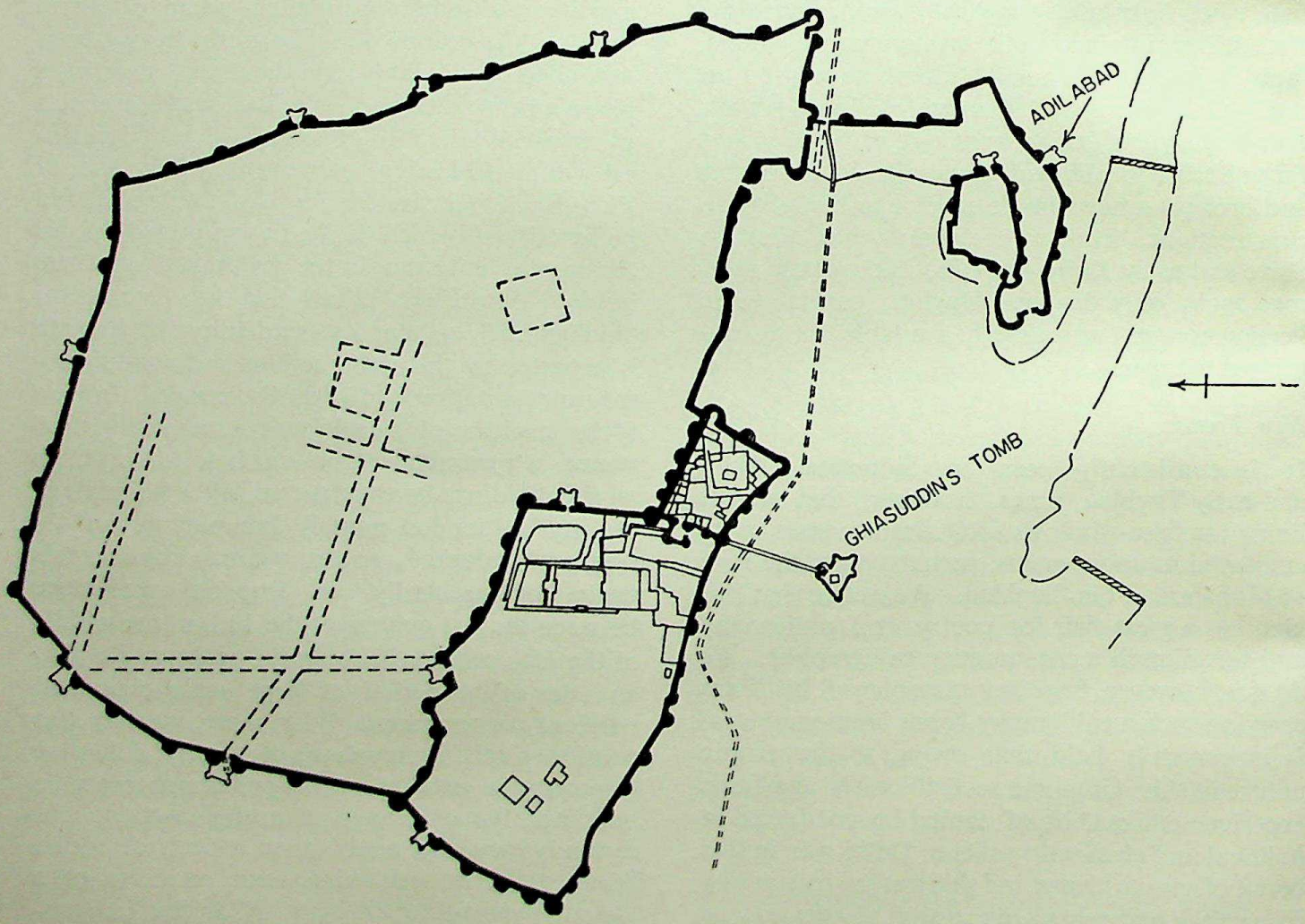
15. *Tughlaqabad with Adilabad and Ghiyasuddin Tughlaq's tomb*



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Firuz Shah's times, besides, seemed to aim at economy as well as scope for labour in public construction rather than costly decoration and to that extent, it reveals a period of spurt for basic architecture and of recession from ornamental architecture. His buildings yield sufficient evidence on the status of architecture and are not a lean period for formal building style. Gardens have also been mentioned but we do not yet know if these had any specific plan, layout or horticultural scheme. This was perhaps to wait till the advent of that great connoisseur of gardens, Babar. But Firuz Shah's keen interest in waterworks is something outstandingly significant. Already, during the time of his two predecessors, the area around Tughlaqabad (fig. 15)—a potentially dry and rocky terrain was provided with barrages and *bandhs* which not only would have lent some coolness and colour to this zone but also should have stimulated erections of structures in mid-water, as in the case of the tomb of Ghiyasuddin Tughlaq itself. In this connection, it would also be necessary to deal with another popularly held theory of historians that Mohammad-bin-Tughluq did not have any major constructional programme (besides Jahanpanah) to his credit. It could be seen that Begumpuri and Bijayamandal area do carry evidence of efforts during and after Allauddin's times and prior to Firuz Shah. We have also to add that pyramidal domes, wherever they occur, should be more the repair of the Tughluq times and certainly before and during the times Firuz. The evidence is further emphasised by another interesting structure of the old Delhi area, namely the tomb of Kabiruddin Aulia or what is called Lal Bangla or Lal Gumbad. (fig. 16 and Pl. X). This tomb is often taken as of the late Tughluq times, on the basis that, had it been of pre-Timurid invasion, it might not have survived the holocaust, in its present intact form. At the same time, other scholars have pointed out that this tomb was indeed originally intended for the tomb of Mohammad-bin-Tughluq himself, but had later been appropriated to an *Aulia* saint of the times. That its *mazaar* is still venerated for its dispelling or exorcising evil spell cast on the mentally affected, would show that it had an important place. It was Mohammad-bin-Tughlaq who was a great favourite of Nizammuddin Aulia, as against his royal father. Its lack of elegance of vertical proportions is balanced by its typical batter, sandstone workmanship and massive size. It is also having a gate, a mosque and cemetery ruins, around, mostly of later times, which clearly bespeak pre-Firuz character. Thus, we may take it that its association with the *Aulia* saint should also have saved it from the depredatory propensity of Timur. The erection of Ghiyasuddin Tughlaq's tomb on the Multan model should have temporarily created a vogue (perhaps by the same craftsman) and continued during Muhammad-bin-Tughlaq's times and Kabiruddin Aulia was a witness to this brief period of high refinement prior to Firuz Shah. It has been also shown now that this tomb was perhaps graciously allotted for the favourite Deputy Prime Minister of Mohammad Tughlaq, whose name was Malik Kabir Qabul Khalifati and to whom the Sultan was greatly attached and about whose death the Sultan learnt, when he was lying sick at Gondal (Saurashtra) in A.H. 751 (1350A.D.) shortly before his own passing away at Thatta (Sind) a year or less later. All told, we have in the pre-Firuz times, a clear dichotomy in building modes, wherein cut-stone work in sandstone and marble were surely used, alongside rugged undressed or rubble masonry erections. That the palace of thousand columns 'Hazar

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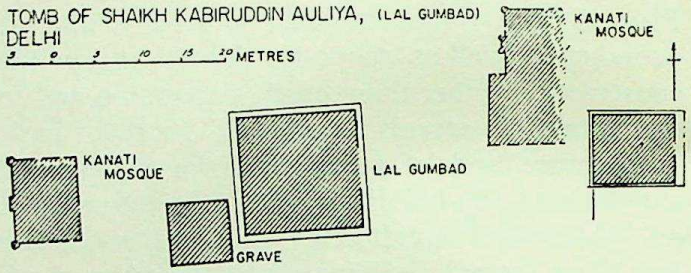
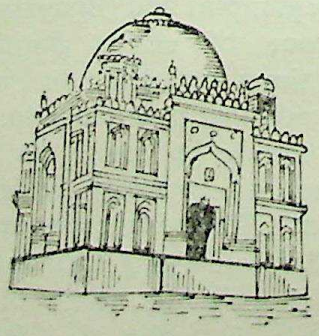
16. *Tomb of Sheikh Kabiruddin Aulia, lay out*
17. *Roof Chattri, as in Chote Khan's tomb, Delhi*



Sithun' of the time of Allauddin and Mohammad Tughlaq had not only been celebrated but was even casting its spell on Timur is seen in his records that, after the conquest, the ladies of his harem went sight-seeing in the town, especially including the 'Hazar Sithun'. The general picture thus created is that of two clearly distinctive phases—one extending from Qubtuddin Aibak to Muhammad-bin-Tughlaq—of ruggedness coupled with lavish and monumental dignity, and another from the time of Firuz—of simple elegance, functional emphasis and planned and leisurely design and layout and greater quantitative output. It is obvious that Firuz's work had a very lasting effect on the subsequent Sayyid and Lodhi enterprises which were, by and large, compositions in rugged but simplified masonry and plaster design and informed often by battered walls or columns and minarets. They, however, definitely add one important element, namely, the cluster of superstructural cupolas and *chattris*, massive *chajjas* and rather low plinth and generally squattish domes and more profuse use of sandstone.

Chattris and Minarets

These miniature *chattris* and cupolas (fig. 17) had never been seen in the earlier phases when minarets, pyramidal, domes, etc., were more in vogue and they occur for the first time in the times of Mubarak Shah Sayyid (*c.* 1434 A.D.) and are repeated in the 16th century both in Delhi and Gwalior, as in Isa Khan's tomb (*c.* 1547--Pl. XI) and the tomb of Mohammad Ghaus. Such of the corner cupolas which are seen in Mandu in the 15th century structures, like the tombs of Hoshang Shah (1440 A.D.) or in the octagonal Suri structures of the 16th century, as at Sassaram (*c.* 1535-20 A.D.—fig. 18) are different from the Sayyid ones, in that they are having the *chattris* only on top corners of the



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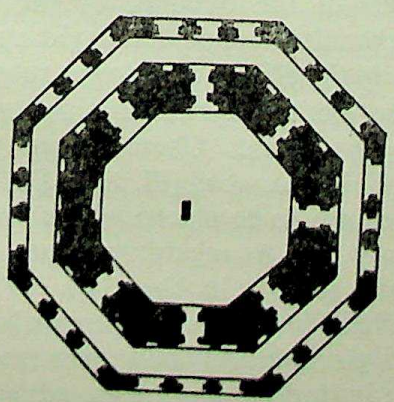
18. *Tomb of Sher Shah Sur at Sassaram within the tank*

octagonal body of the structure, whereas the Sayyid structures have it located in the corners as well as centres around the drum. They appear to come up in the 15th century suddenly, as they are not seen in this way even in structures like the Shish Gumbad of the same century in Delhi. They are continued in this way only in the tomb of Isa Khan aforementioned. They represent a new urge in variegating the skyline of the superstructure, from the rather simple stunted *kanguras* and massive dome scheme that prevailed in the Tughlaq times. We may perhaps glean in this a reason that the Sayyids, having been part of the ruling aristocracy of the Sharqi line of Jaunpur, had a more expansive approach to the aesthetics of the building of religious structures in themselves and hence had introduced certain special Tughlaq values into them. It could be seen, for instance, that the tomb of Mubarak Shah Sayyid, for its volume, has a singularly light or weightless character achieved by the incessant series of triple arches which open into the structure, which together with the low plinth, the batter, the conspicuous *chajja* and the subdued but substantial central domes achieved a certain elevational balance, making it a clear evolution from the rigid, simple, functional structures that were the norm in Firuz Shah's time (see, for instance, his repairs at Mahipalpur). Thus we may say that with the Sayyids—which was indeed followed by the Lodhis also, in conceptual evolution—we have a transitional era. The Jaunpur architecture was heavily leaning towards the typical Tughlaq style of Imperial Delhi. *Tarikh-i-Firuz Shahi* makes it amply clear that even the name of the town was based on his 'determination to give the name of Sultan Muhammad Shah, son of Tughlaq Shah and as the soverign bore the name of Junan, he called the place Jaunapur (Jaunpur)'. In his *Futuhat* he calls Muhammad Tughlaq variously as 'his kind patron by whose bounty he was reared and educated' and 'my late lord and patron'. Percy Brown had opined that the effort of the Mubarak Shah monument in its upper parts is having an error of perspective and foreshortening and being masked by those coming down, resulting in a stunted elevation. He believed that these defects were rectified in that of Mohammad Shah Sayyid's monument, by raising the drum and kiosks slightly and by reducing the side opening of the lower arch than that of the central. While Brown is concerned with perspective alone, we are legitimately also concerned with whole composition and the *chattris* added in the centres of the octagon of the drum. We see in fact that the raising of the drum was a process which had logically led ultimately to the double-dome and hence the first effort of Mubarak Shah Sayyid is a finite onward stage of the movement and should have had a relationship to the natural environment, then existing, and the buildings or space nearby, and not the perspective of the



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monument, as available today. If we had been able to reconstruct the original environment, its own original contribution to the onward march of elevational balance would have been more than clearly apparent.

Architecture certainly assumes aesthetic dimensions and was indeed the underscored feature when the Mughals came on the scene. But, for all the apparent inelegence of the raw materials used on the exterior profile, new grounds were already being broken in design-potential and the resultant artistry. The political conditions of the Sayyids were not conspicuous for any peace or prosperity, and the Lodhi rule, though better, was also keeping the ship of State in uneven keel and yet, their contribution to architecture of the royal Islamic mausolea commend themselves to both our admiration and attention and this is also true of a turn in craft evolution, in a continuing vista of Islamic rule, before the advent of the romantic Mughals. While the city of Mubarakabad had not had any happy auguries for fruitful growth, (see *Tarikh-i-Mubarak Shahi*, p. 78) by Mubarakkabad having turned out to be Kharababad (ruined city), by the Sultan having been assasinated in it in 1434 A.D. within three months of the founding of the city; and being short lived, Siri Fort was again and again used, especially since Kotla Firoz Shah had also been given up. The royal and craft patronage then acquired a new *elan*, thanks to the super *bourgeois* art outlook of the aristocracy which was clamped on the throne of Delhi, first under Khizr Khan (son of Malikus Sharq Malik Sulaiman) from 1414 A.D. and from 1424 A.D., his son Mubarak Shah, and by Bahlol Lodhi, and Delhi's claim to a pre-Mughal stage of architectural growth had also been to a degree fulfilled in the Sayyid and the Lodhi tombs. In the latter case, the conversion of a mausoleum into a complex, entered by a gateway and provided with a mosque separately, introduced another of the evolutionary element — which the Mughals also copied in some of their mausolea, which conferred a ceremonial *maqbara* scheme on these structures.

Double Dome

The Lodhi tombs also introduced another evolutionary factor, namely, that of a 'double dome' with a separate inner and outer shell, at two distinctive elevational stages of the central rise and helped in conferring a distinctive slenderness to the building and this was widely followed in Mughal times, as well. Perhaps the earliest tomb where this attempt had been made was in the tomb of Shahab-ud-din Taj Khan (1501 A.D.) but in the tomb of Sikhandar Lodhi (1518) it comes home to roost and in the initial stages were, despite their size which was often stupendous, poor in aesthetics, owing to their derelict isolated character and rather plain plastered exterior, embellished only by bands of sandstone or marble for the series of false niches on the faces, and false storeys on the massive vertical walls. They were all, again, of the cuboidal type; not octagonal and were bereft of the cupolas, of the batter and heavy *chajjas* also, seen in the Sayyid tombs. These were clearly the efforts of a lower rung of landed aristocracy—imitative and repetitive and are seen as Bare Khan and Chote Khan pair, Bara Gumbad, Shish Gumbad (Pl. XII), Dadi-Poti pair, all of which are to be placed within the early-mid 16th century A.D. As regards mosques, however, a large public mosque in the time of Sikhandar Lodhi, called Moth-ki-masjid, compels our attention by its girth, entirely new elements and by its layout. It is indeed an integrated stage in the

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mosque scheme of elements which are part of both the Sayyid and Lodhi tomb architecture. Its chief features are the basement of massive proportions with side and rear entrances—the latter to reach the main floor—projections on the back wall against the main *mihrabs* with battlemented *minars* in which fluted columns are also introduced in the penultimate stages below the roof-cornice, and an arcaded basement between the turrets; the rise of the new storeyed octagonal side-wings, one on either end, which merely repeat sectionally the Sayyid tomb appearance and included a projecting front screen wall at either end, sandwiched between the porch and the balcony units, at the two floor levels. These porches were of corbelled and lintelled scheme, more similar to those of Firuz's structures. The important feature introduced at this stage, however, is grand basement terrace and the recession of the main mosque sanctuary wall within it and also the innovatory side and rear profiles which give satisfactory and varying perspectives from any angle from which the monument is seen. This is therefore, again, another finite stage in the environmental presentation of the monument, as an architecturally versatile model for visual aesthetics; and this becomes a prevailing obsession in most of the mosques of the later periods. As regards the double-dome itself, it could be seen that its purpose was non-functional essentially, since irrespective of the inner domed ceiling, which has only an interior perspective, it is the upper dome that has an exterior perspective but becomes the additional load on the main walls of the mausoleum, wherever it is, whether Lodhi, or Mughal.

Thus, the outer dome had to be raised according to exigencies by merely raising the drum. In Deccan, for instance, in the *Madrasa* of Mohammad Gawan at Bidar, its middle wing dome was raised so sharply that its near view from the terrace is far from comely, but in the overall grand proportions of this *Madrasa*, the defect gets adequately mitigated, even without any corner *chattris* to camouflage it. The double dome, thus, is more an innovation than an invention and had to come off, when larger and taller domed buildings were planned.

Other Innovations

It should, however, be stated that the front view of Moth-ki-Masjid prayer chamber, with its blocked lamp-niches on the vertical jamb and the horizontal recessed attic course over the *chajjas* are somewhat jarring and inaesthetic, but are inevitably drawn, as an abridgement from the Jami Masjid of Jaunpur (1470—fig. 19)—in the front pylon. The central ventilator arch-opening within the main nave facade, above the spring level, also has a certain disharmony of horizontal and vertical bands and thus one may say that, while the arched facade openings of mosques carry their own lineal evolutions of form more sluggishly, the totality of the model, as an exercise in compositional harmony of shape in an otherwise rugged looking raw material, achieves a high watermark of excellence. Indeed, in the Jamala masjid of Delhi (1536 A.D.), the main nave facade arch is made much more elegant by the subdued plane surface of the spandrel spaces and by the introduction, on the other hand, of a horizontal series of niches with a central knob medallion on the under cornice and by totally doing away with *chajjas* and replacing them by wide bands horizontally running continuously from one end to the other of the facade. The jambs have been additionally made three-dimensional by the introduction of fluted minaret on top. Even in the

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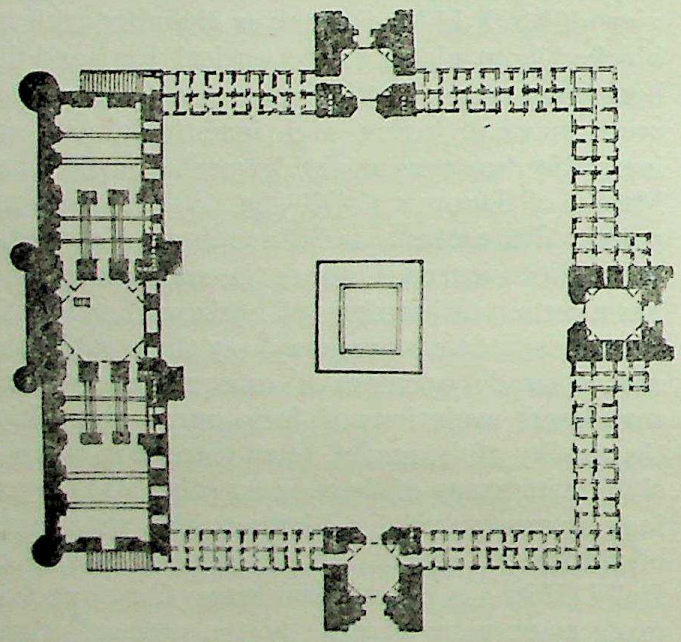
19. *Jami Masjid, Jaunpur, plan*



more ornate *jali* screen arch space and slender bands of the main nave arch and an infinitely better surface workmanship and finish, as seen in Qila-i-Kuhna Masjid of Sher Shah times at Purana Qila, Delhi (1545), we do not have the *chiaroscuro* and harmony of horizontal and vertical components of the facade that we have in Jamala Masjid.

Royal and public patronage in civic construction

In assessing the overall picture of both the architectural climate, environment and the *ensemble* related to the civic layout in Delhi under the Sultanate, Khilji, Tughlaq and Sayyid-Lodhi regimes, one has necesarily to battle with meagre data on the demography, civic limits and relationship between land and water in the landscape. It should be presumed, however, in the medieval situation, that the city was essentially bound by the fortifications of the respective periods, on the basis of civic safety, secular activities and geographical limitations. We start with Qila Rai Pithora which virtually engulfs the entire present day Mehrauli village and its environs. It should rather be more effective if we are able to plot them on a notional map of the Delhis and the structures that became relevant and affiliative to each of the cities, and also the general pattern of shift of habitations. Qila Rai Pithora, Tughlaqabad, Siri, Jahanpanah nexus seems to be accented on an entrenched layout, without facile access to water bodies which are therefore artifically created by *Baolis* like Gandak, Rajon-ki-Bain, and Uggar Sain and bunds and *Hauzes*, as at Adiladad, Hauz Shamsi, Hauz Khas and Hauz Rani. However, as a short interlude, the erection of Kilu Ghari brought a riparian situation. The first major shift of this kind, however, took place only in Firuz Shah's times and a reversion to inland entrench-

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ment, mostly using Siri or Jahanpanah, notwithstanding the short-lived and ill fated Kotla Mubarakpur, took place in the Sayyid and Lodhi times, whereafter the city was virtually reduced to a provincial status in early Mughal times, with the shift of the capital to Agra. The experiments at Agra (though located on to the Yamuna), Fatehpur Sikri (though central to Rajasthan Awadh and Delhi), etc., brought their own practical experiences to the dynasties concerned, and a reversal to the original venue at Delhi was finally signalled during the time of Shah Jehan. It would be understandable that the first Mughal king Babur, with the heart on the 'green patch and garden' should have shunned the then existing habitational zones of Delhi—none of which stimulated any special inspiration for such a horticultural venture, being devoid of adequate water in running channels. Agra did give them some better response then, but the resumption of metropolitan life in Delhi by the later Mughals is itself a proof positive of the fact that, on the one hand, Agra was not stratigically as much suitable for capital as Delhi and, on the other, that the Imperial heritage in Delhi was irresistible and had created already a gracious skyline—despite Timur's devastations—and was venerable and culturally mature.

Maintenance

It could be seen that the erections of the pre-Mughal kings, having been widely separated from each other, in so far as the seat of power of the capital or the citadel was concerned, could not have conduced to any consistent upkeep or additions and alterations. The basic plan of a fort wall of citadel or even the mosques and *maqbaras* had not been changed or modified and wherever rarely done, as in Firuz Shah's time when some conscious repair or maintenance was attempted at the behest of the king, they had been perhaps replacement of old doors, or decorative elements or repairs to roofs and walls. Thus, the maintenance of either the civic structures or the royal abodes was not systematically carried out, for the above reason. It is, at the same time, obvious that maintenance is primarily contingent upon constant public use of the areas, whereas consequent on the frequent shifts of the capital, the older ones were often relegated to stagnant or nondescript or casual use, by the existing or floating population of these suburbia, and in the meanwhile, the old palaces and other public buildings were also prone to be freely dismantled and material reused for private purposes, resulting in their decay. The repairs enumerated by Firuz Shah tend to show pointedly that religious edifices like the Jami Masjid in Mehrauli and mausolea of the past kings in specified cases, were seemingly continously used by those who have a nexus with the premises, either by direct association with the buried person or by the special reverence evoked by them. But this had been all too inconsistent and was only occasionally drawing upon the inclination of the King, although the *mazaars* of saints were better-served in this regard. But, on the whole, the constructions which were the fresh creations of that period alone received regular attention. This would show that the older cities in Delhi had successively transformed themselves into mere, less populated suburbs of the contemporary capital of Delhi and did not have either the attention or the care of the *elite* inhabitants or the civic masters of the prevailing metropolis.

When Firuz Shah was taking credit for the existence of several public mosques in his capital city, Firozabad, he seems to be clearly including also those which had existed as Jami Masjid, or Idgah, or daily mosque, as the case may be,

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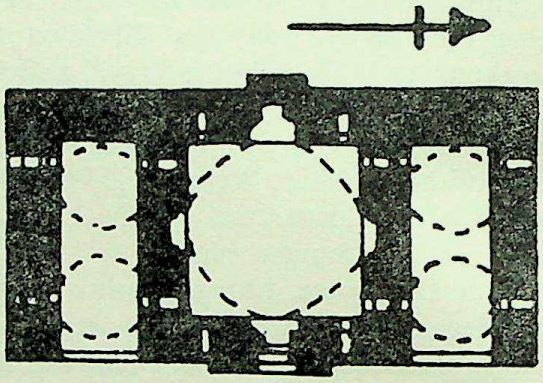
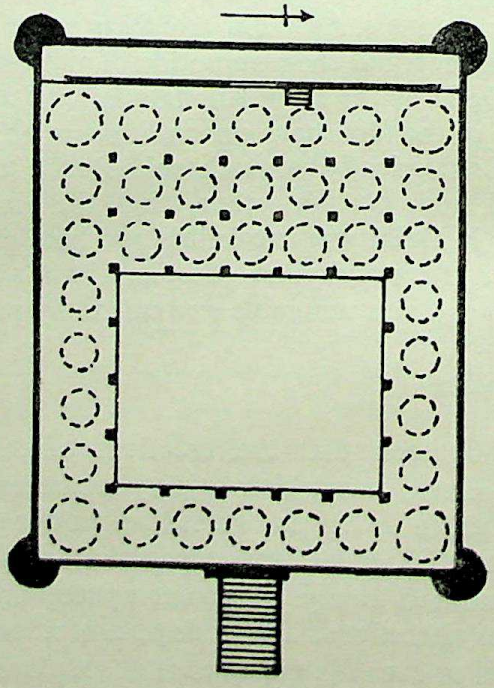
20. *Jamaat Khana mosque, Nizamuddin, Delhi, plan*
21. *Kali Masjid, Turkman gate, Delhi, plan*





already *before his time*, as part of the civic limits of his city. The frequent revolts and uprisings in the capital when the Sultan was away, as it happened during the times of Balban or Allauddin Khilji or Ghiyasuddin Tughlaq and even the attempts to kill Firuz Shah before he came to the throne, show that power of lucre was more prevalent and group rivalries, based alike on whether one is an Afghan, Turk or Mughal (as perhaps also whether one is a Shia or Sunni) created disorderly conditions wherein the peaceful life of the citizens was constantly threatened. It could also be that the total number of Islamic inhabitants in the capital and its suburbs in Delhi would only be a part of the total Islamic and non-Islamic inhabitants; which latter, according to the interdicts of the Sultan, had to pay taxes in various ways to the royal exchequer and thus perhaps at that time, the number of mosques existing were more than sufficient for religious service. We note that inside the first Delhi (Qila Rai Pithora), there was mainly the Jami Masjid erected by Qutbuddin and expanded by Iltutmish and Allauddin, while one more was at Sultan Ghari, Mahipalpur (Pl. XIII A & B), a mosque-*cum-Madrasa*-mausoleum; one more was at Nizamuddin (Jamaat Khana mosque—fig. 20), another Kali Masjid at Nizamuddin (fig. 21,) one more was in Kotla Firoz Shah (Pl. XIV), one at Begumpuri (fig. 22 and Pl. XV) and another the Khirki Masjid (fig. 23 and pl. XVI A-C); two *Madrasa-cum*-mosques and one Jami Masjid at Mehrauli and Hauz Khas, variously of the Khalji and Tughlaq times; and the mosques in Tughlaqabad were not strictly within the city limits of Firozabad). Firoz cites a total number which may refer to just a few more than the above (which could have been in Siri or Jahanpanah or Kilughari, the now disappeared mosque at Okhla (whose *mihrab* record is in Red Fort museum now), the Shahpur mosque

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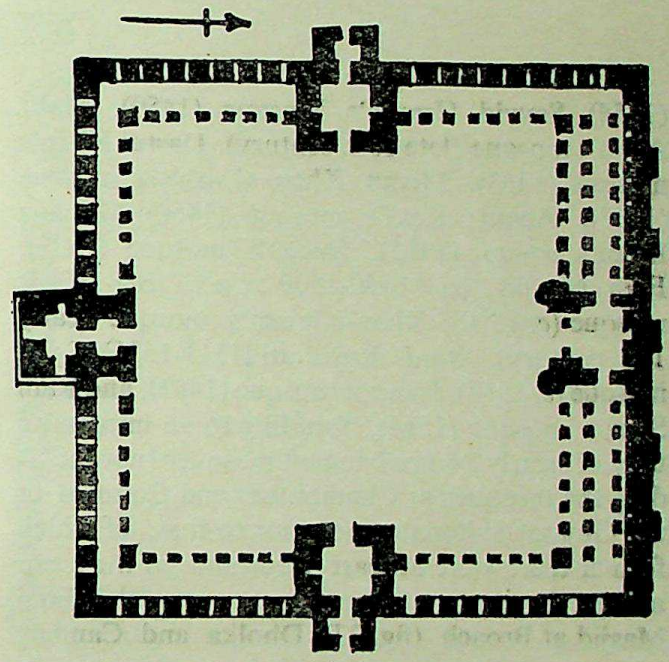
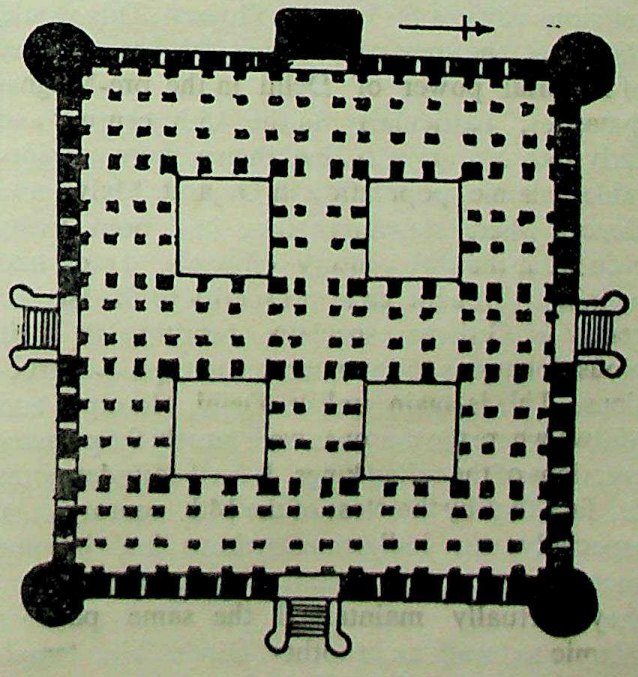
22. Begampuri masjid in Jahanpanah, Delhi
23. Khirki Masjid, Jahanpanah, Delhi

erected by Niyazkhan in the second year of Firuz Shah (1352); and perhaps also Khan-i-jehan's mosque (789 A.H.). But it could be seen that these are virtually the total provision upto the time of Firuz and not all of them of his own time. After the period of Firuz Shah Tughlaq and upto the end of Lodhis, we have only the Moth-ki-Masjid, Jamala Masjid, Bara Gumbad Masjid (Pl. XVIIII A& B) in Lodhi tombs. On the other hand, the city Jaunpur claimed at least three very large mosques, Bengal claimed only two main mosques at Gaur (Adina Masjid) and Pandua (Chota Sona Mosque), Ajmer one of pre-Mughal times (Arhai-din-ka-Jhonpra). The largest number of mosques however, was in Malwa, which claimed two at Dhar (Kamal Maula and Lat-ki-masjid—figs. 24 and 25) and at Mandu, namely Jami Masjid, Masjid Dilawar Khan's and Malik Mughlis Masjid and the *madrasa* and mosque in Ashrafi Mahal. Upto the time of the Lodhis, we are able to see the survivals of only less than 25 major mosques in the whole of upper India (excluding Punjab and Kashmir) built of durable materials. We may presume, however, that there might have been as many number of more perishable materials in the area as in Bihar (Tirhut) during the period and used by common people. We have, of course, not taken note of Rajasthan (other than at Ajmer) where certainly there were a few mosques, as at Jalor, Nagor, Barikhattu, Bayana, Kaman Chatsu and other places. In Gujarat, the mosques at Ahmadabad, however, are many at or before the time of the advent of the Mughals at Delhi, such as Mosque of Sayyid Alam (1412), Mosque of Ahmad Shah (1414), Haibat Khan's mosque (1474), Jami Masjid (1424—fig. 26), Qutb Shah's mosque (1449), Sakar Khan's mosque of the time of Sultan Mahmmud Beghara (*Acc.* 1359), Sarkhej mosque (16th century A.D.), Malik Shaban's mosque (1452), Bibi ka Masjid





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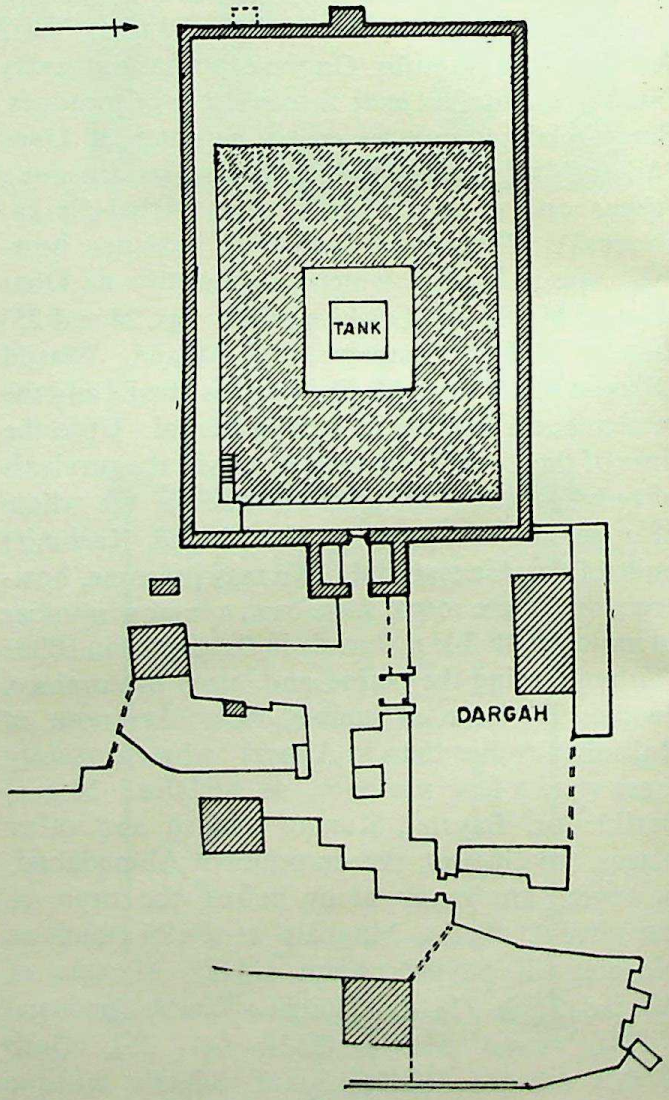
24. *Bhoj Shala or Kamal Maula mosque, Dhar*



(1454), Sayyid Usman's Mosque (1450), Malik Alam's mosque (late 15th century), Dastur Khan's mosque (1463), Miyan Khan Chishti's mosque (1465), Achut Keki's mosque (1460) Muhafiz Khan's mosque (1485), Queen's mosque (1521), Fath Masjid (*c.* 1450-1500 A.D.), Bai Harir mosque (*c.* 1500), Khan-i-Jehan's mosque (early 16th century), Rani Rupavati (1511-1526), Paldi mosque (*c.* 1515), Isanpur mosque (1469), and Rani Sipri's mosque (1514), totalling to an impressive tally of nearly 24 pre-Mughal mosques (not including the mosques at Champaner) and Conndal of the Gujarat Sultanate and prior to that, of which former there were at least three and of the latter at least three more. There were also the Jami Masjid at Broach (fig. 27), Dholka and Cambay which are of pre-Sultanate Gujarat and certainly pre-Mughal and of foundational import in the religious edifices for Islam in Gujarat. This would show that the areas well outside the *direct* control of imperial power of Delhi in the pre-Mughal dynasties, particularly in the 15th century and early 16th century A.D., had then a more considerable Islamic population in Gujarat, Malwa and Deccan where seemingly they had been living even from the 10th century onwards. Trade had seemingly brought great prosperity to the Islamic gentry in Gujarat especially, resulting in their pious donations to innumerable mosque constructions. This is again unlike Delhi, Jaunpur and Malwa where the mosques were mostly the primary creations of the ruling kings. It further underscores the fact that by the close of the 14th century A.D. especially, the indigenous artisans had become such adepts in Islamic construction that they virtually maintained the same pace in Islamic as well as in other Hindu/Jain temple erections. It certainly also speaks a great deal of

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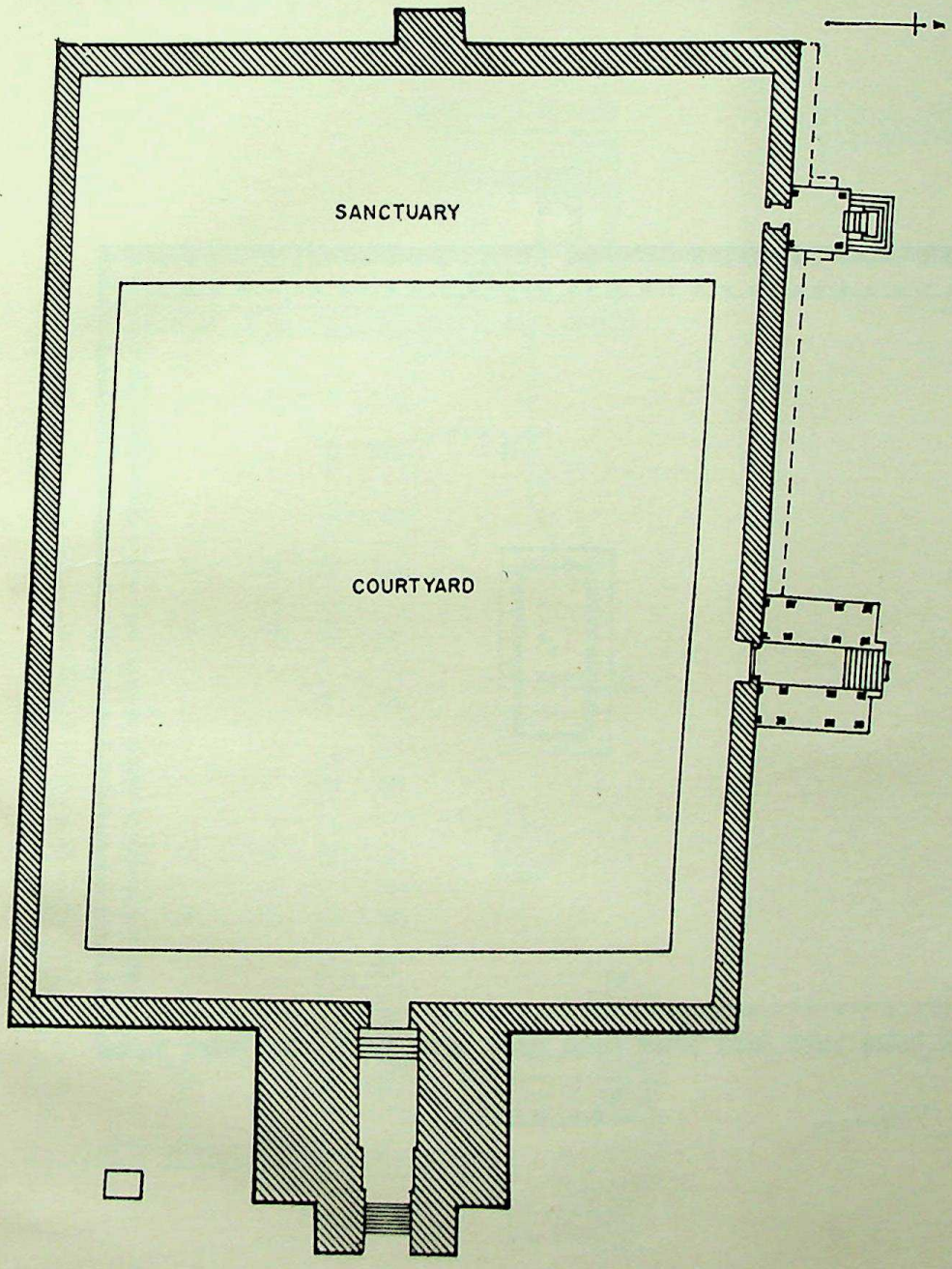
25. *Lat Ki Masjid, Dhar, Plan*



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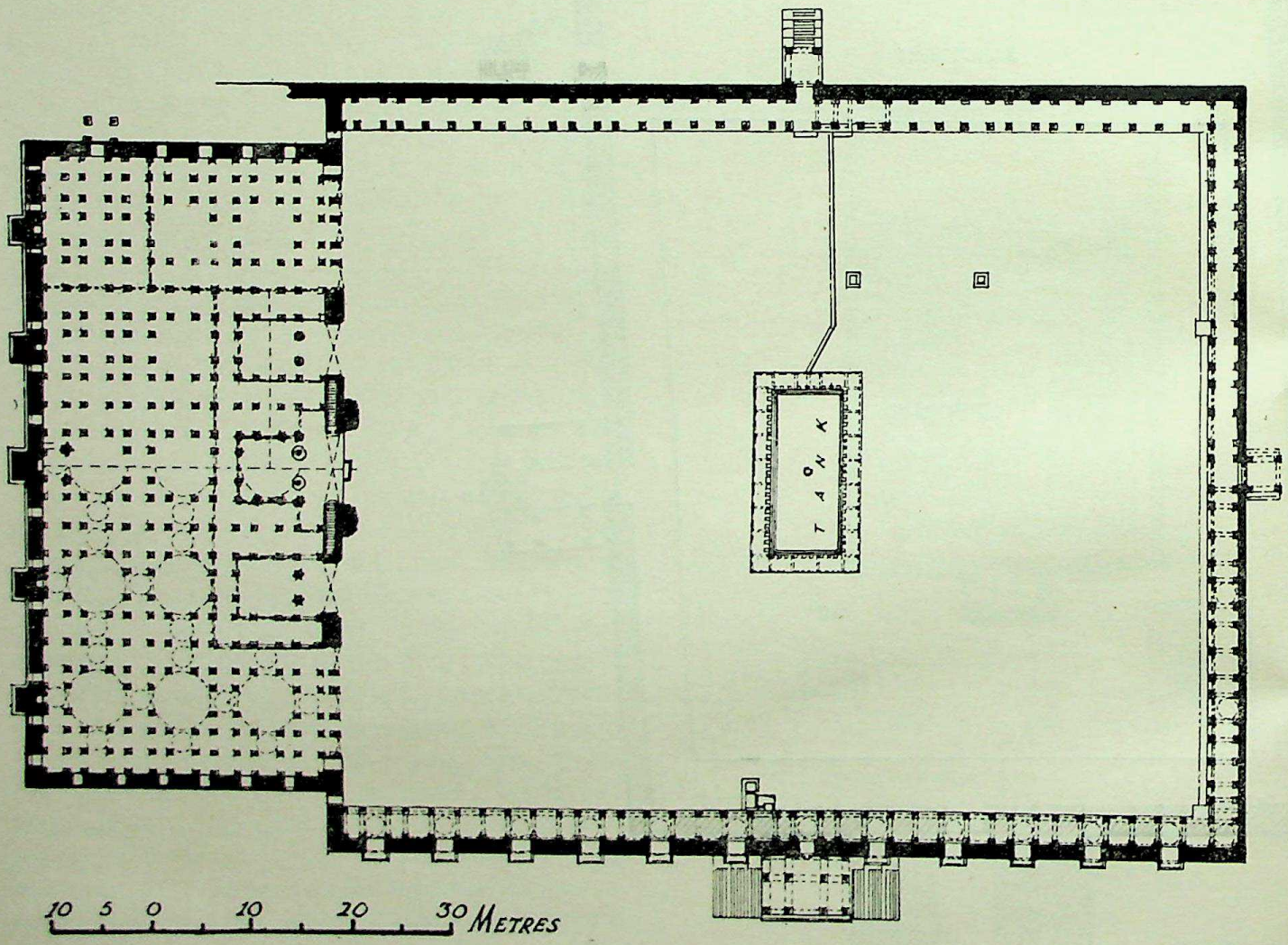
26. *Jami Masjid, Ahmadabad*



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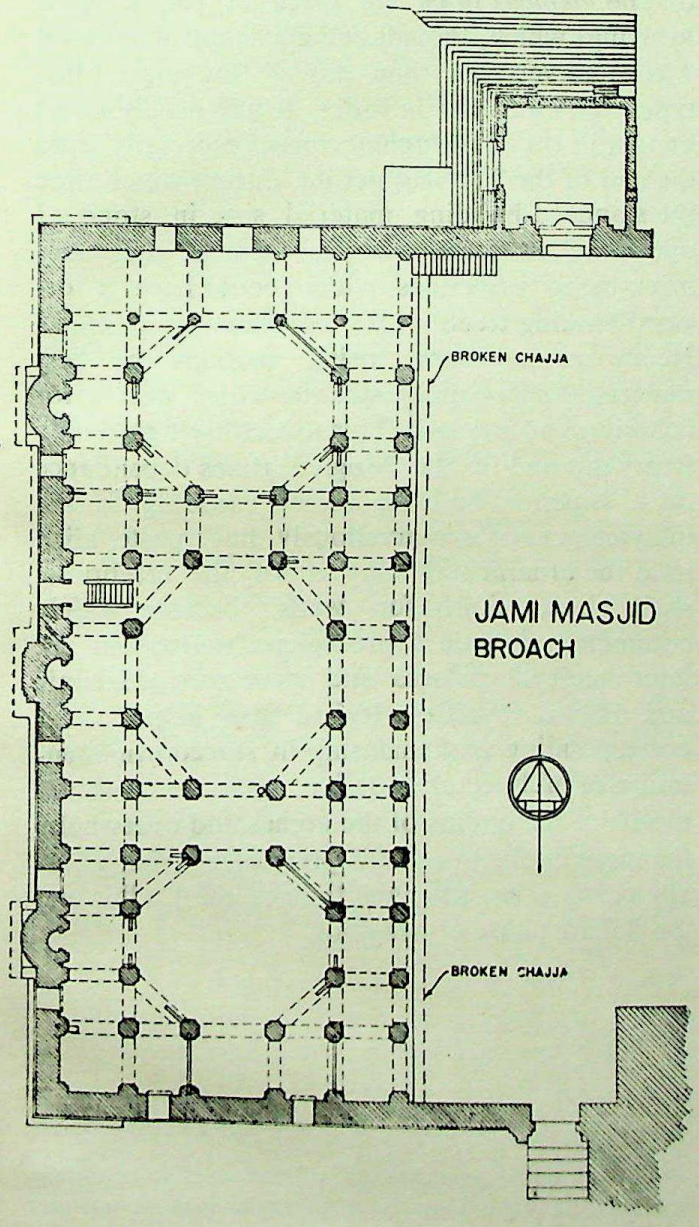
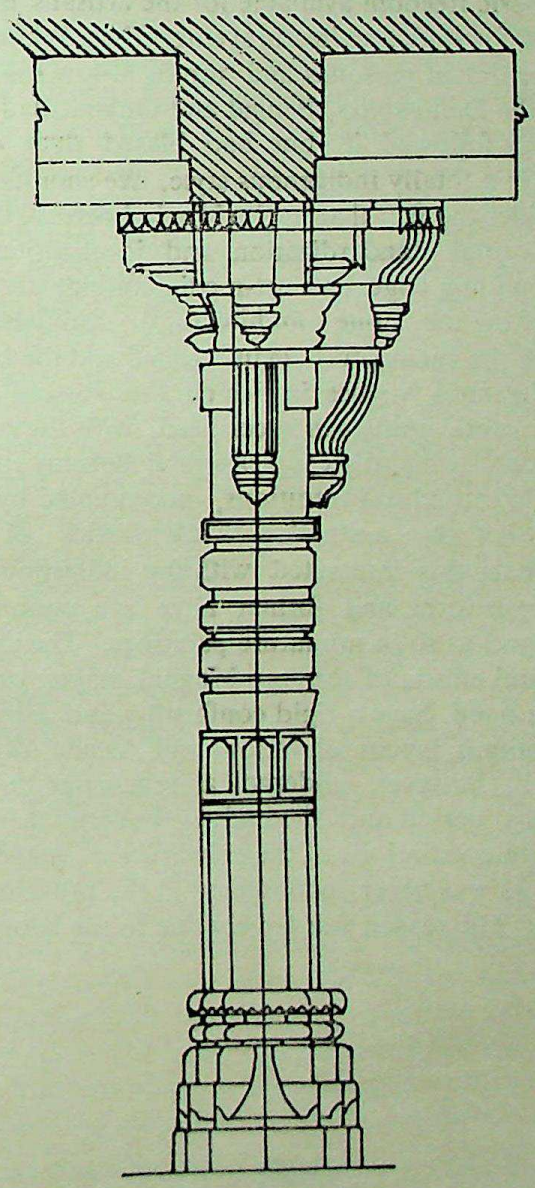
27. *Jami Masjid, Broach*





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the basic freedom available for the artisans in the zones for such architectural enterprises. While the upper Indian mosques and tombs follow essentially the Delhi styles, Bengal and Gujarat had not blindly followed it, but had blazed their own trail in a totally indigenous style. We should also consider the fact that in the Mughal period, there was a total standardization and idealization of the building vogues as art-media, ambidextrously following the stone architectural traditions in which the Indian craftsman excelled and the brick architectural vogues in which the Persian and other exotic craftsmen specialised, with the result that one is able to see a pleasing dichotomy in the Mughal structural traditions, accentuated by the fact that the aesthetic characteristics of the Mughals also interacted with the indigenous, in so far as form and format alike are concerned and no less so in miniature paintings. The architectural efforts of the pre-Mughal stages, on the other hand, have a rigid conformity and conventionality in layout, elevation and facade design, which, however, undergo a seachange in the Mughal period and themselves undergo a series of subtle variations of the principles of spanning, such as was never encountered in the pre-Mughal times. The reason was largely due to the adoption of the *lakhauri* brick (in place of rubble stone hearting) which, though being a small sized unit, was more versatile than any of the larger brick types known earlier in India. It was hardly much known in the pre-Mughal times, especially upto the end of the Tughlaq period, during which time the standard building material size in stone of undressed character was so variable that any brick-based principles which could have a forward-looking trend cannot be effectively posited.[2] Heavy mortar work, using perhaps the best material (*kankar* lime) was the chief device for cohesion and strength. This aspect itself gradually wears out and in the Mughal times dependance on a superior building mortar leading to the inlay-cement of a marvellously fine paste, alike used for ornamental inlay as for the celebrated shell plaster finish for walls, became widely common and made a prodigious headway in the later medieval palaces and structures of Islamic and Hindu royalties. It had also helped in a corresponding craftsmanship in stucco ornamentation of architectural design, as in the stalactite motifs of the quoins of the arches and overwhelm the more explicit *squinch* principles which virtually cease to be, after the time of the Lodhis and the Babari phase of Mughals.

2. Where brick is used, as in the Idgah just outside Qila Rai Pithora to the west, near Adham Khan's tomb, it has a larger sized character. This seemingly went on upto Tughlaq times, as this Idgah was said to be used by Timur after the conquest for his court and, besides, there are many graves which are just around the Idgah on the rear, which are purely Tughlaq. In one of these, the mosque wall has a buttress on the back which curves up at the top to meet the wall. This usage is again seen in another residential wall mosque in a Haveli near Hauz Shamsi. This residential structure and three or four more here in fact are also Tughlaq in age. This curved rear buttress top of the mosque wall is also seen first at Multan in Rukn-e-Alam mosque and is thus pre-Tughlaq and Tughlaq.

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Exterior and Interior

Architectural designing of the interior too underwent a significant streamlining and finish and less and less of a manifest presence of the inherent technical devices was involved, while the corresponding exterior designing of elevation was given more visually complex and assertive skyline. The monotony of the pre-Mughal exterior skyline constrasts sharply with the exultant and three dimensional architectonic structuring of the Mughal skyline, including massive screen walls (as in Buland Darwaza types) whose structural ponderosity however, is hardly felt by the onlooker and became a vogue. It could even be hazarded that the pre-Mughal structural architecture was essentially informed by heaviness and grimness, while the Mughal was highlighted by suavity, elegance and impeccable proportions of the outline. The harmony between large structures with a reasonable flat terrace and those with a steep and sensous elevational rise had been better achieved in the Mughals times. That was mainly due to the settled conditions of the economy, social fraternization and lack of any ethnic bias, but the insistent influence of the Persian craft-expertise in surface finish and decorative repertory cannot also be overlooked. The relationship between a curved and a linear form, in other words, was better emphasized in the Mughal monuments than in others. The tendency of the dome, both central and peripheral, to out-weigh and out-do the basic linear horizontal dimensions and volume of the structure was a characteristic of the earlier stages, which was lingering even upto Babarid times, but under Humayun, Akbar and Jehangir, these were sharply eliminated in preference to expansive exercises in linear architectural rhythm, where the domes of the higher level were just floating masses which sit very lightly on their base and do not oppress them. Besides, defensive architecture also got such a spectacular face-lift, in northern India in a way never attempted, much less seen, in pre-Mughal times, where there was a monotony of buttresses and plain walls, with the *kanguras* underplayed and domes overweighted. The rhythm of defensive architecture reaches, however, it highest water-mark in Shah Jehan's times, although Akbar's period laid the foundations for it. Storeyed elevation—which was not a part of a primary Islamic *penchant*—was given the greatest accentuation during Akbar's times to such an extent, that it may even be said that Akbar's time was somewhat a period of recession in the evolving spectrum of Islamic architectural design work, with the exterior and interior overdrawn in protruding members, notwithstanding the ornate surface work. One element which informs Akbar's period which continues into Jehangir's times, however, is the rectangular or pyramidal roof which employed stridently indigenous Hindu principles, whether with a cusped ceiling or square or pyramidal flat dome with multiple finials on the roof or *chattris*, or lintel corbel composition, but was certainly underplayed in Shah Jehan's times in preference for a plain and majestic spanning of interior space, as seen in Red Fort Delhi in Diwan-i-Am and Diwan-i-Khas, unlike the vigorously ornate and encumbered decoration of pillared interiors of the Akbarid times. For the first time, in their long history under the Islamic kings, craftsmen of the Imperial capital of Akbar were able to subjugate the patrons's will and the developments of the age to their predilections and subvert the design-repertory of the true Mughal outlook—though this may be seen achieved already elsewhere in Gujarat in the pre-Mughal times.

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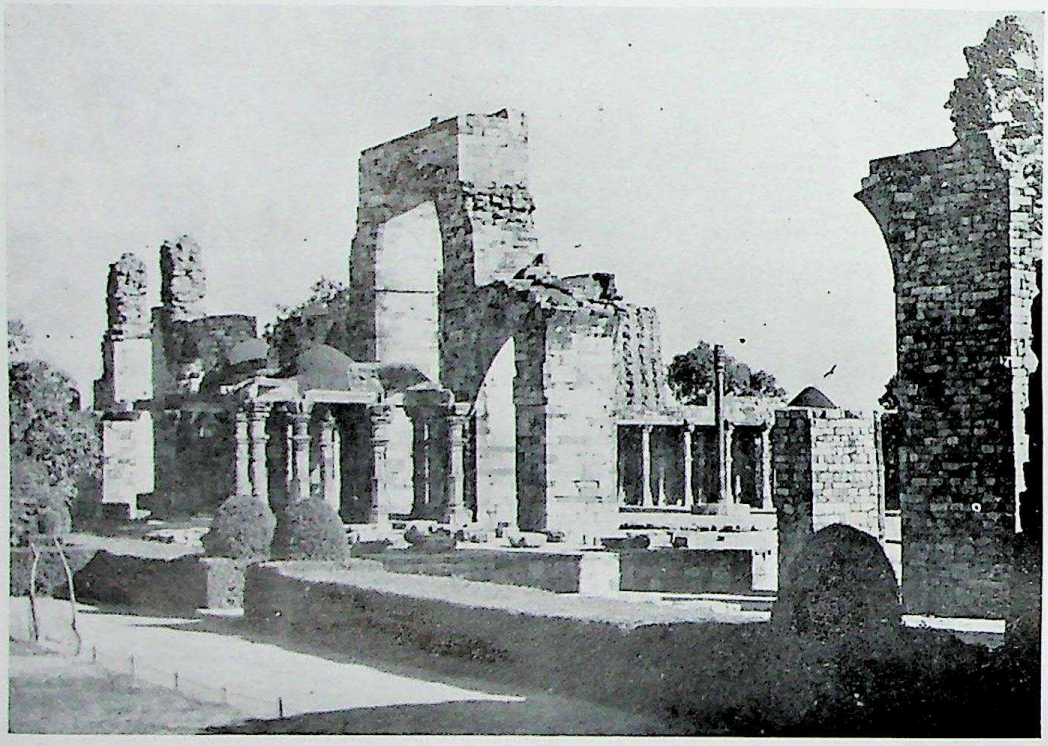
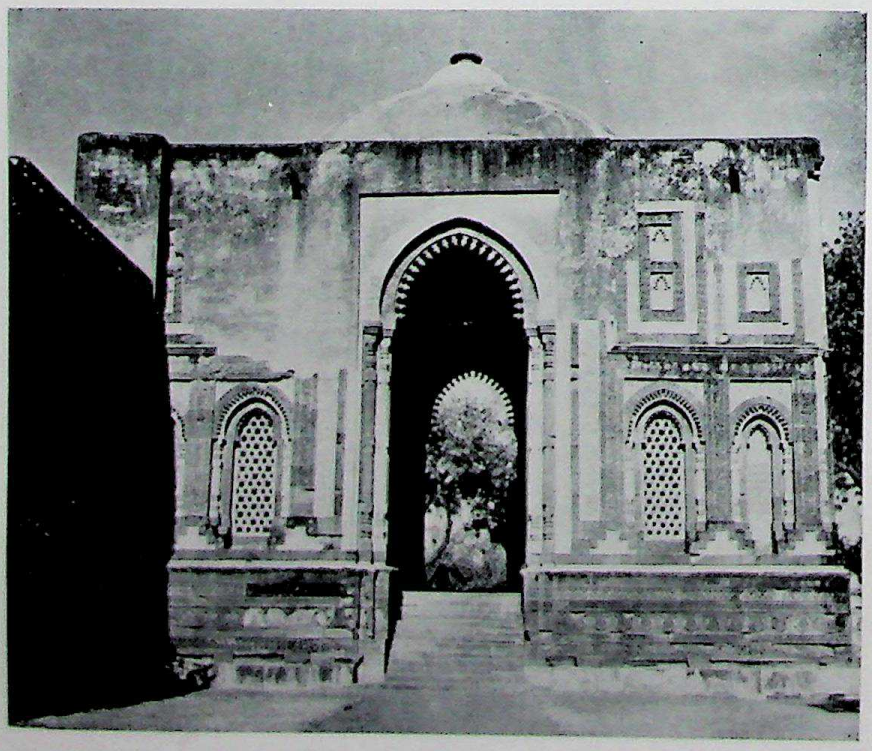
← **1a.** Quvat-ul-Islam Mosque, Mehrauli, showing inscribed iron pillar and the maqsura screen.

1b. Rear view of Qutab mosque screen.

2a. Alai Darwaza, Mehrauli.





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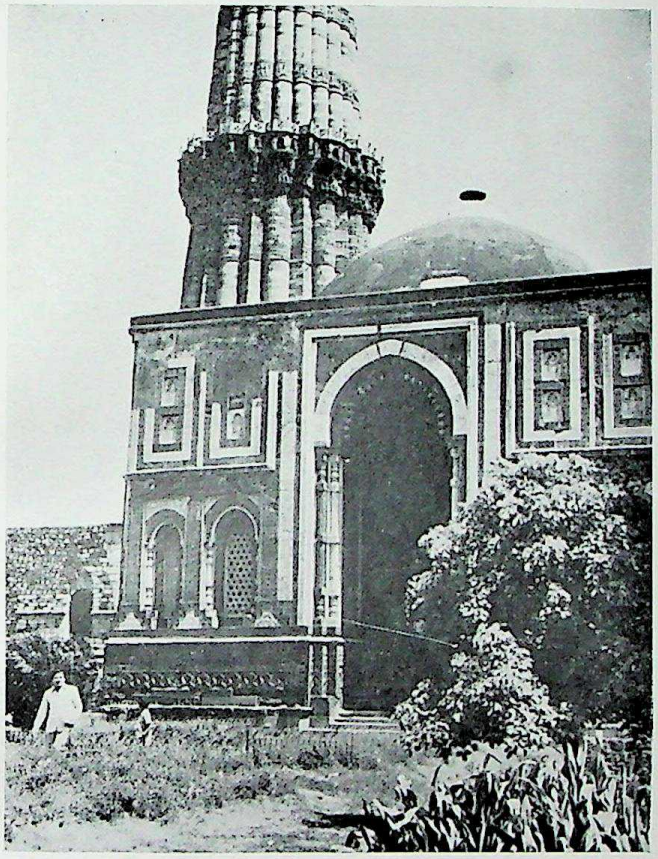
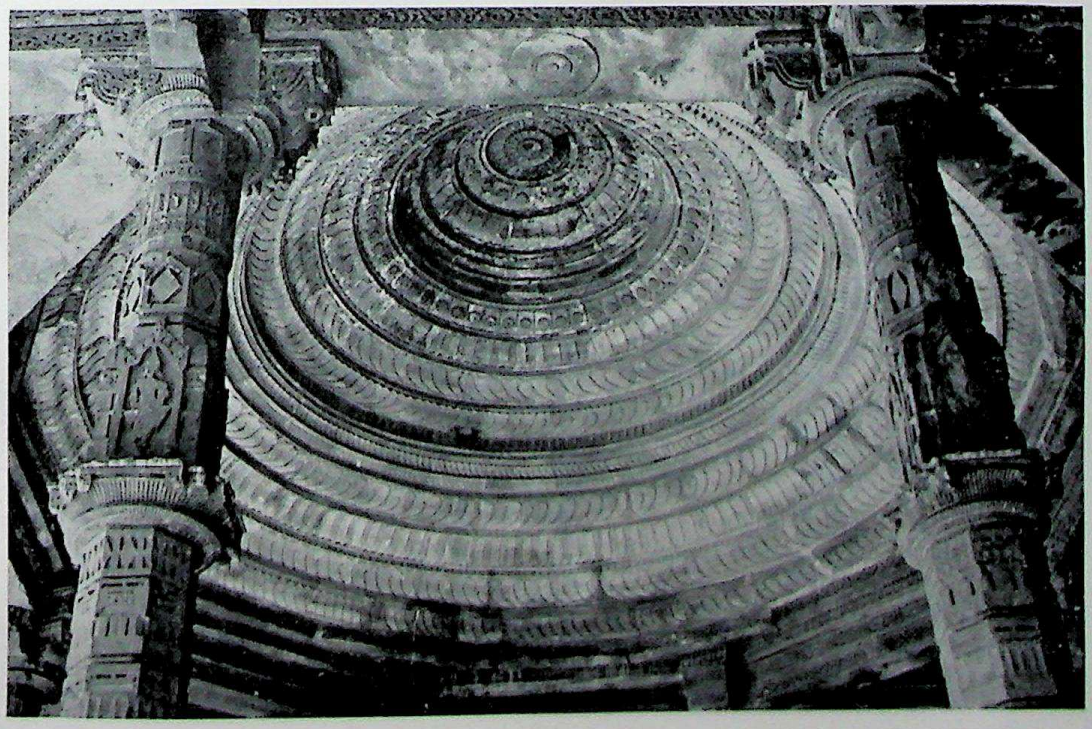


2b. Qutb Minar soaring, behind Alai Darwaza, Mehrauli

3. Arhai-Din-Ka Jhonpara mosque, *intrados* of sanctuary dome, Ajmer.



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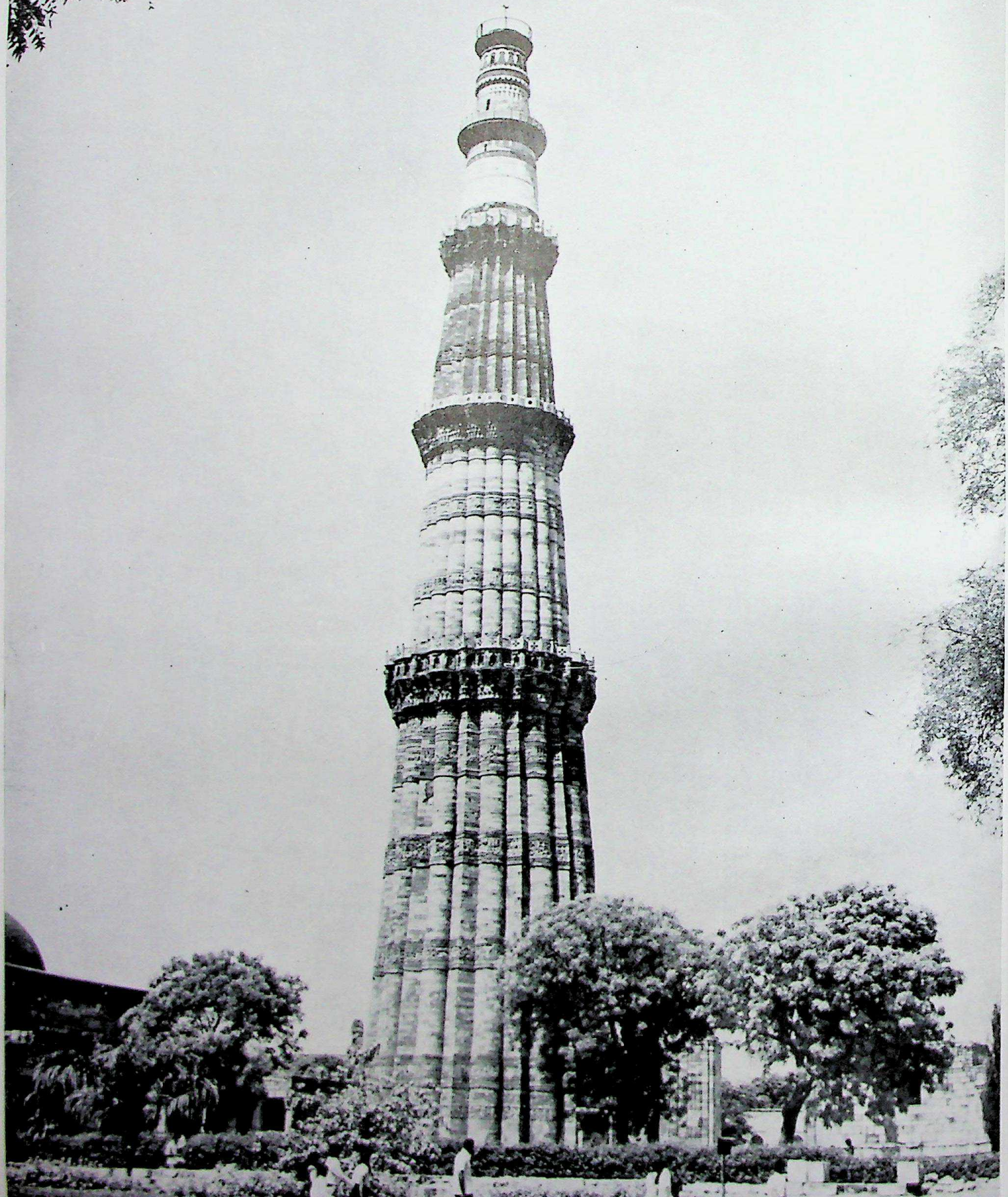

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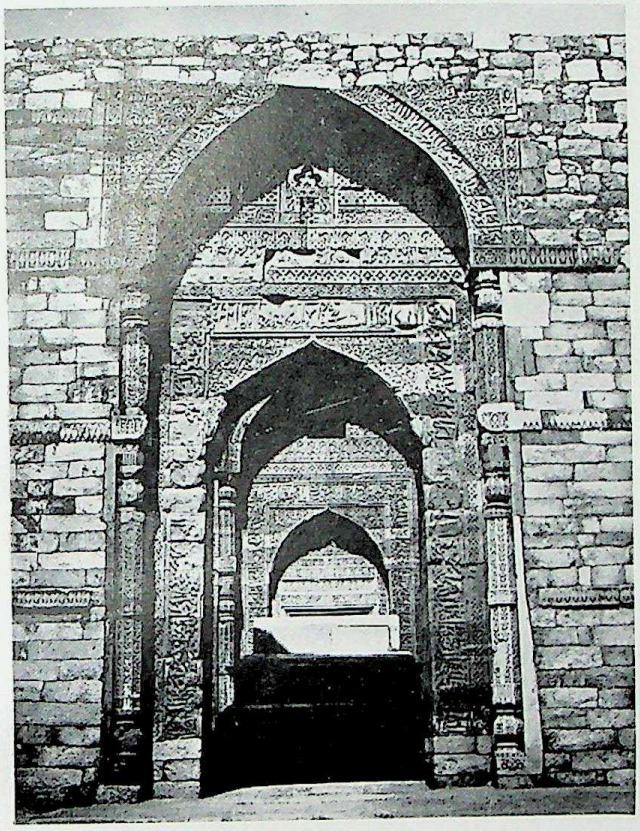
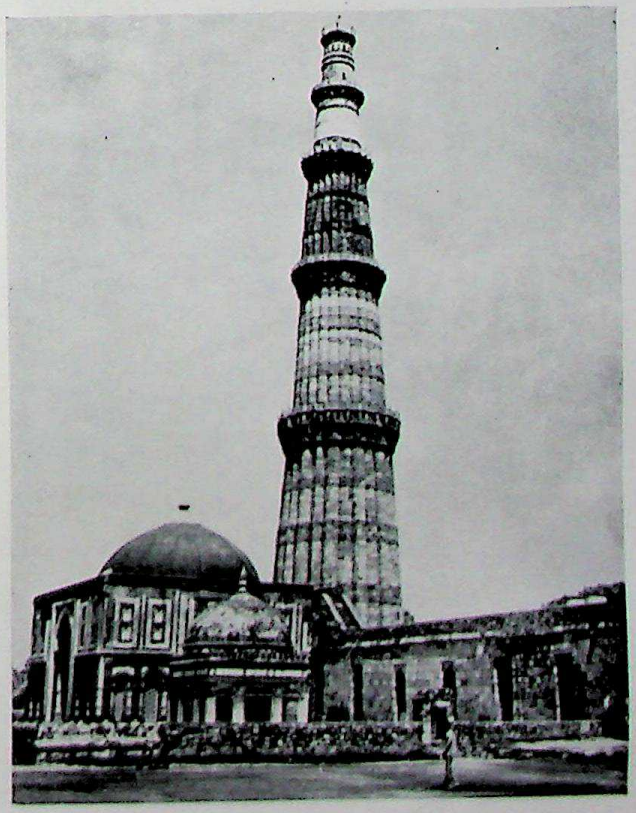


← **4a.** Qutb Minar, Mehrauli.

4b. The ensemble of the Qutb Minar, Alai Darwaza cloister exterior, Mehrauli.

5a. Mausoleum of Iltutmish, Mehrauli.



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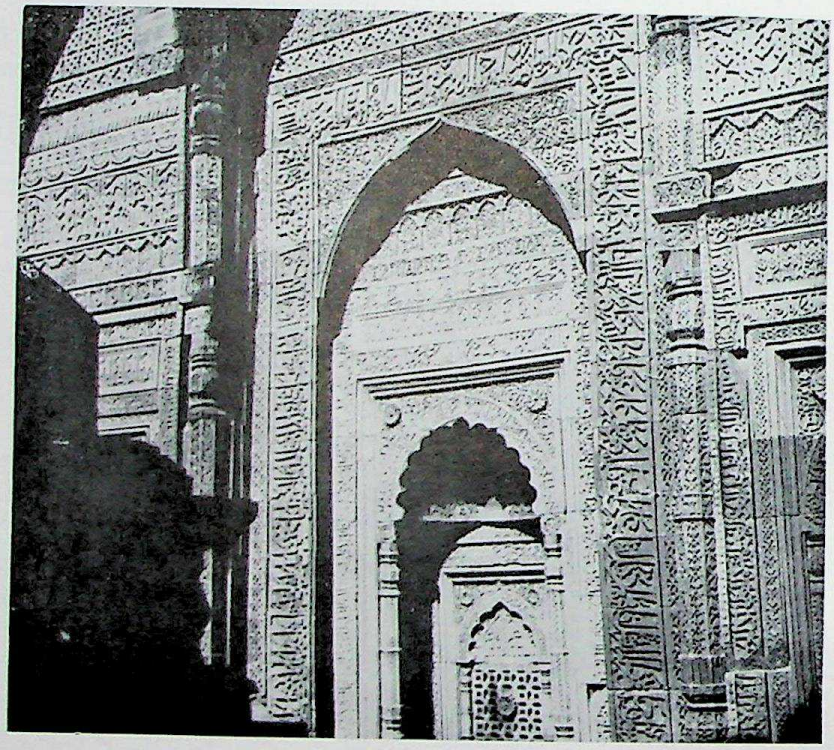
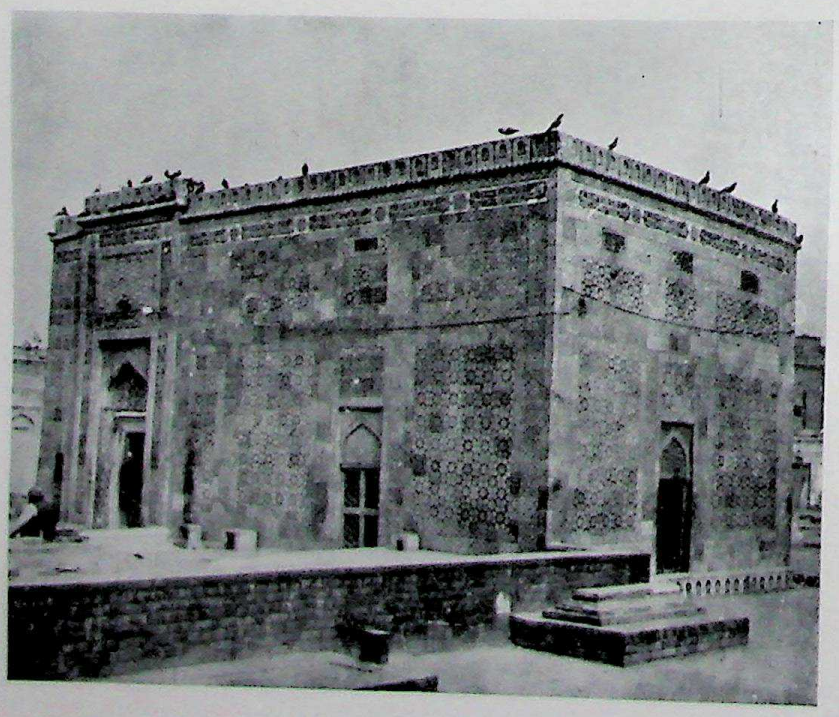
5b. Interior details of Iltutmish, mausoleum

6. Tomb of Shah Yusuf Gardizi, Multan.





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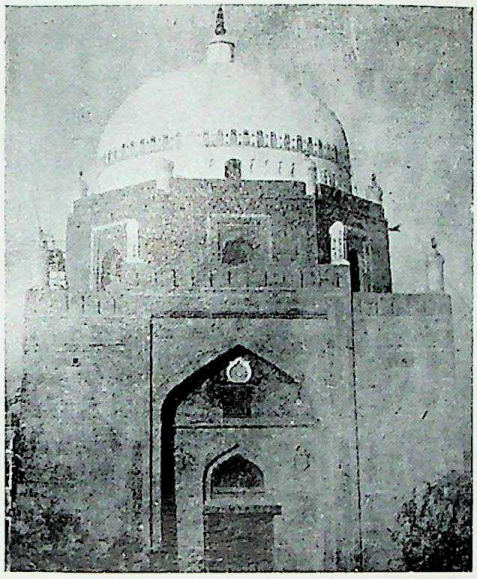
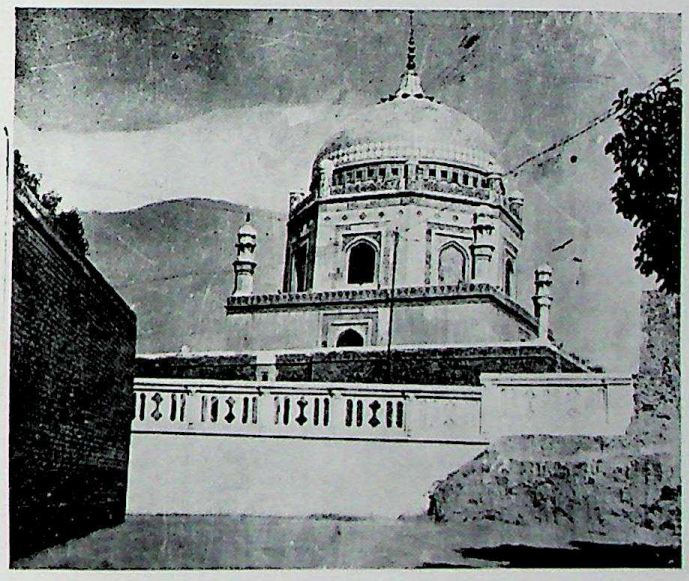


7. Tomb of Shah Bahau'l Haq., Multan.

8. Tomb of Shamsuddin Tabrizi, Multan.

9. Tomb of Rukn-i-Alam, Multan.



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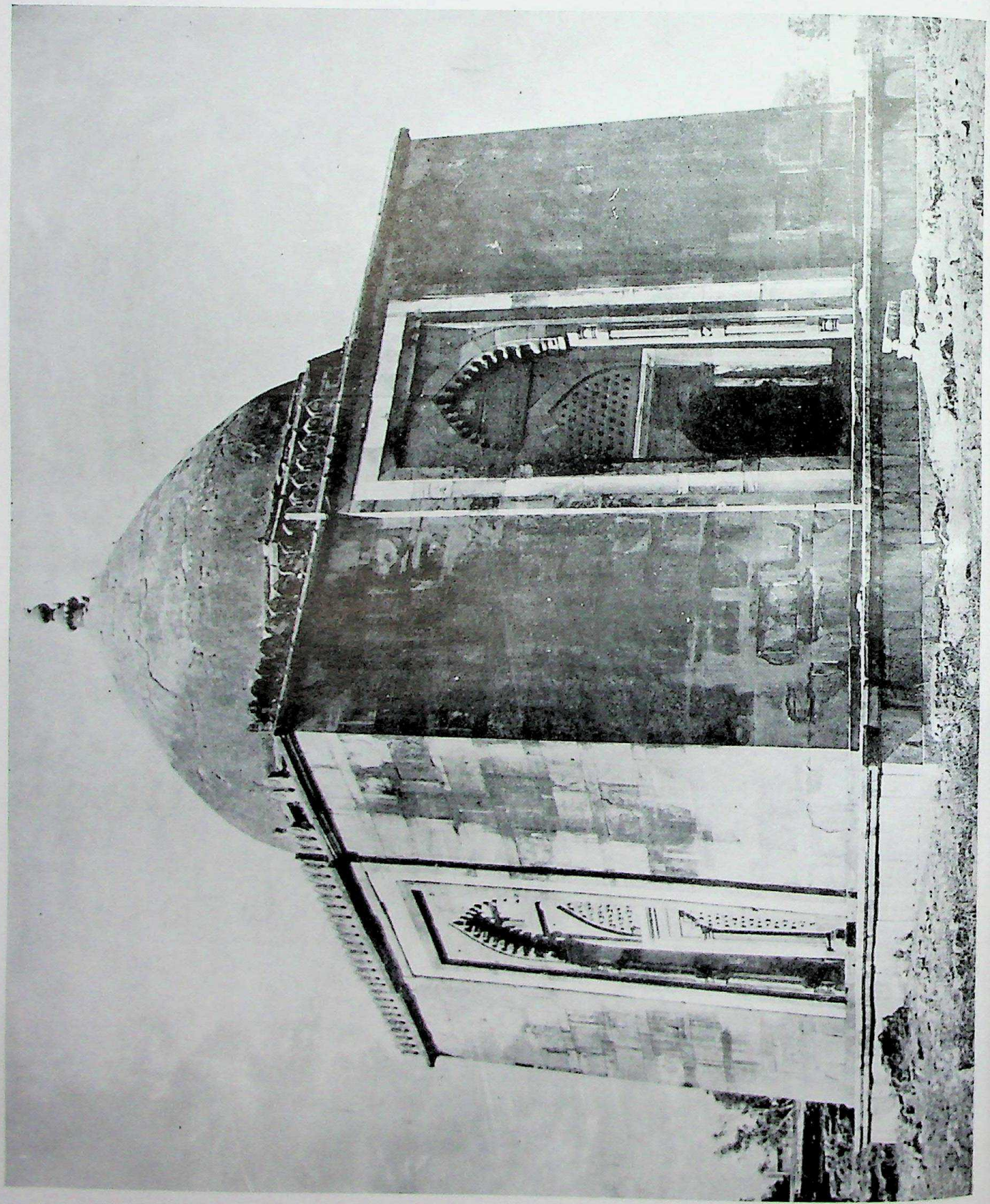

10. Tomb of Kabir-ud-din Aulia or Lal Bangla.

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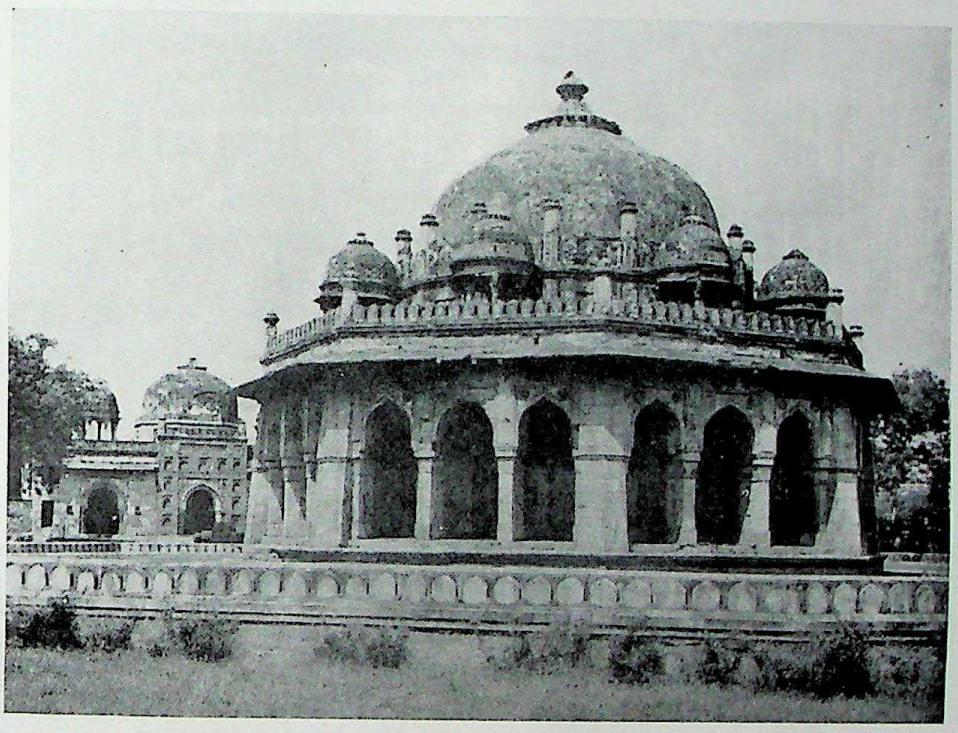
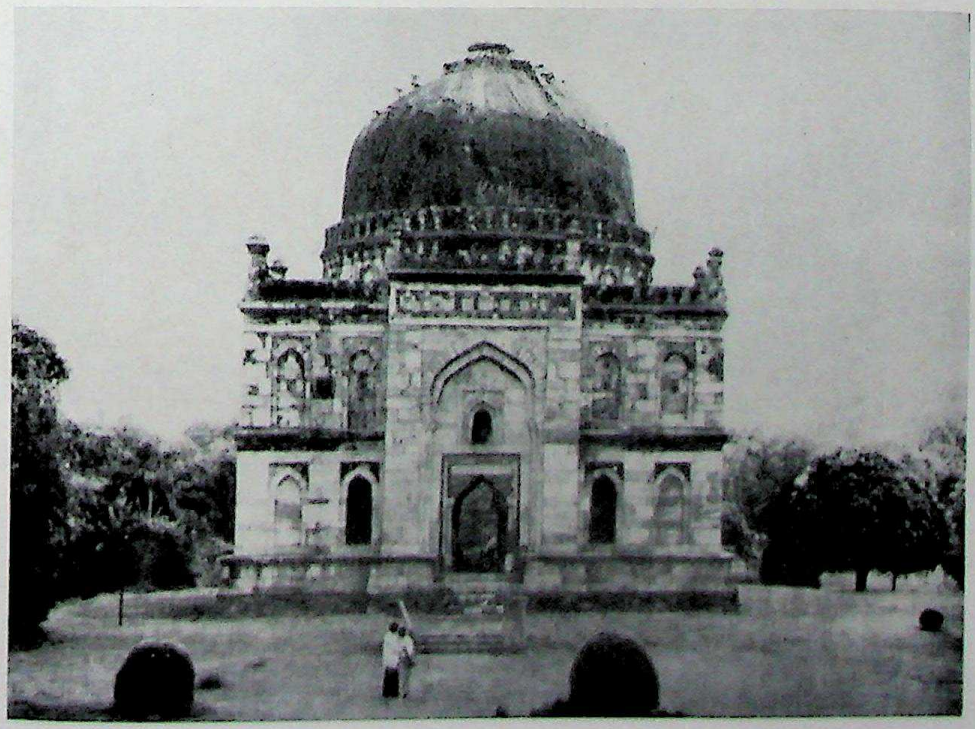
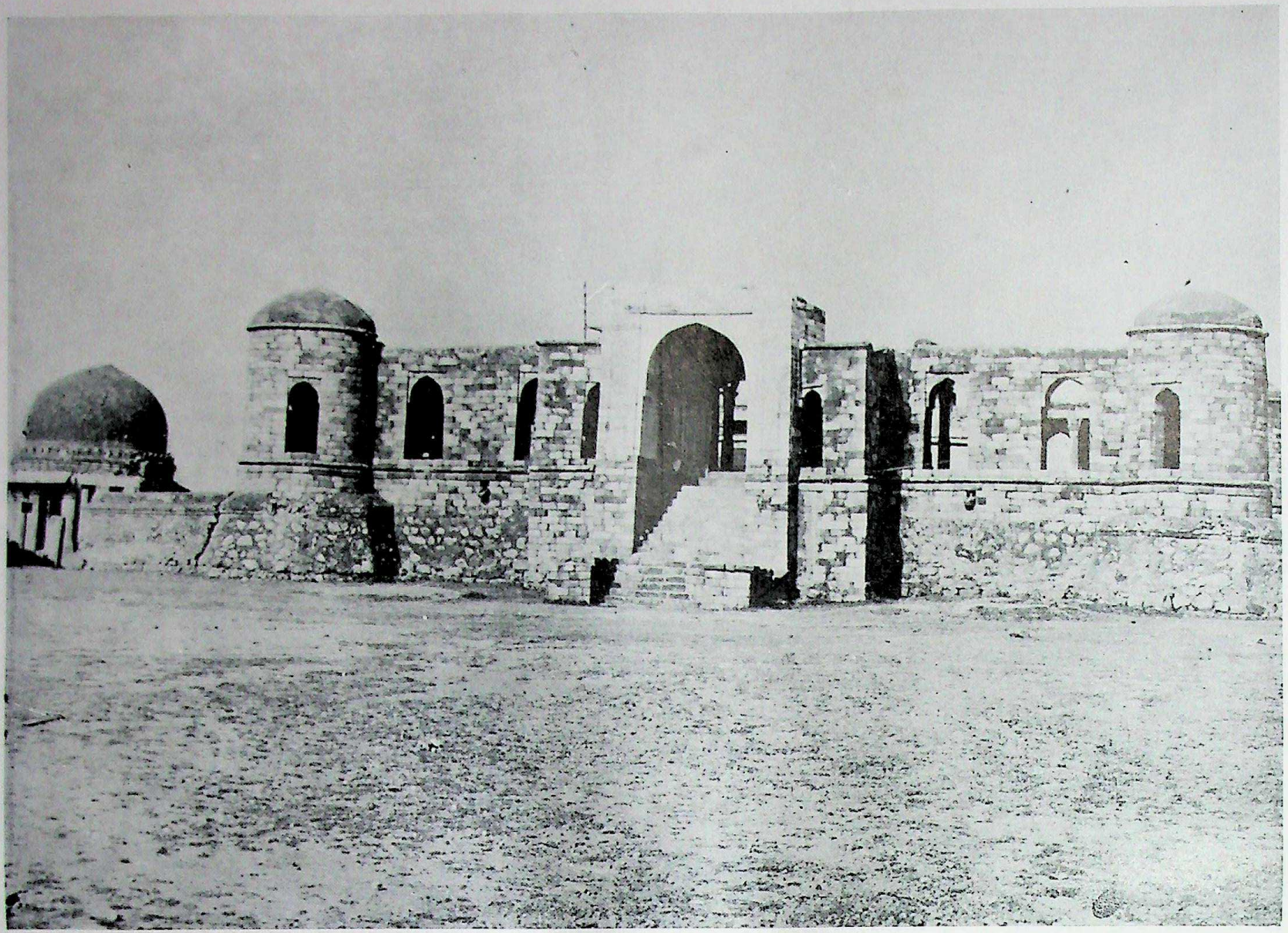
11. Isa Khan's tomb. Delhi.

12. Shish Gumbad, Delhi.





13a. Sultan Ghari, Mahipalpur.



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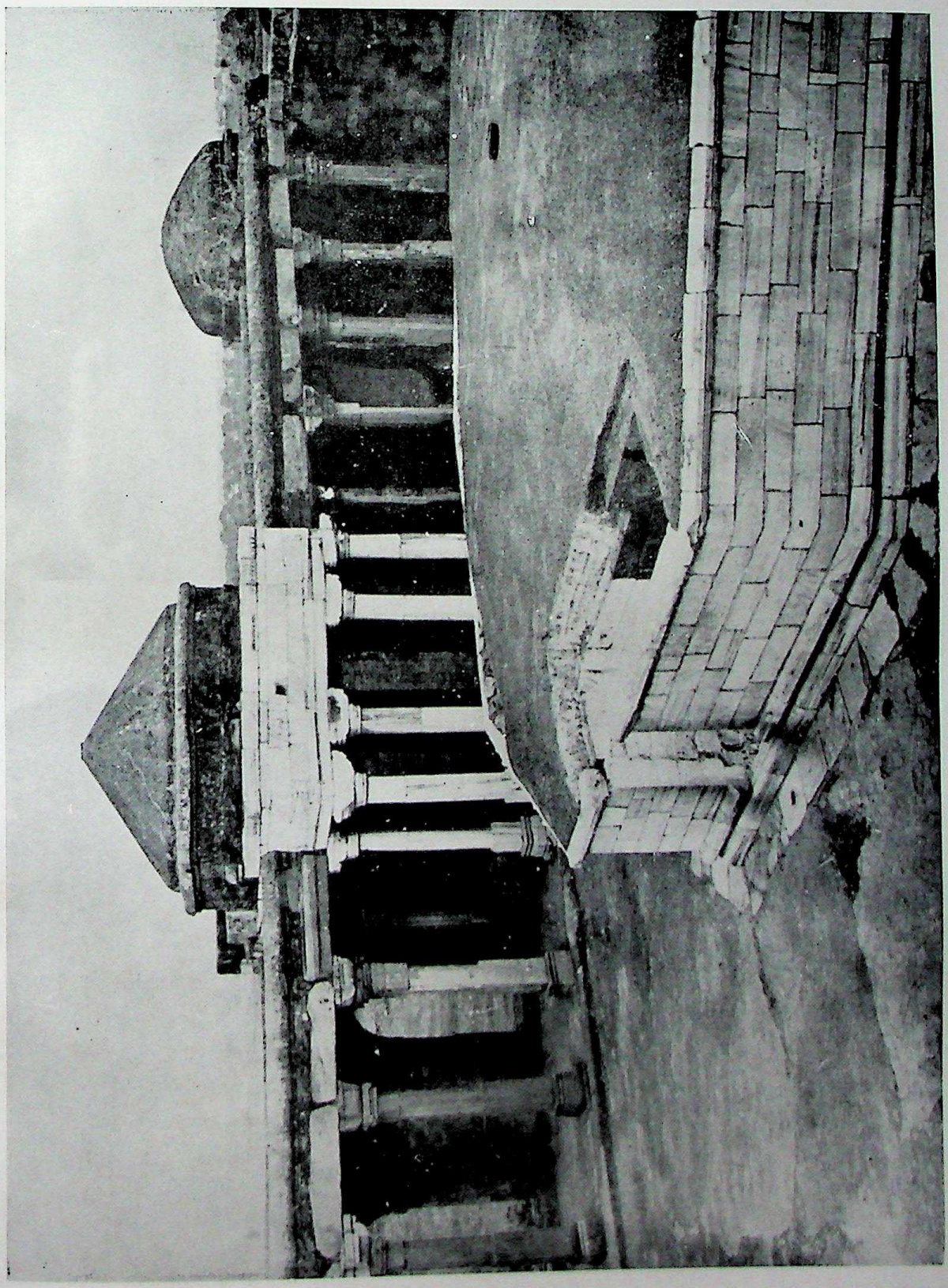

13b. Interior court of Sultan Ghari mosque and crypt dome.

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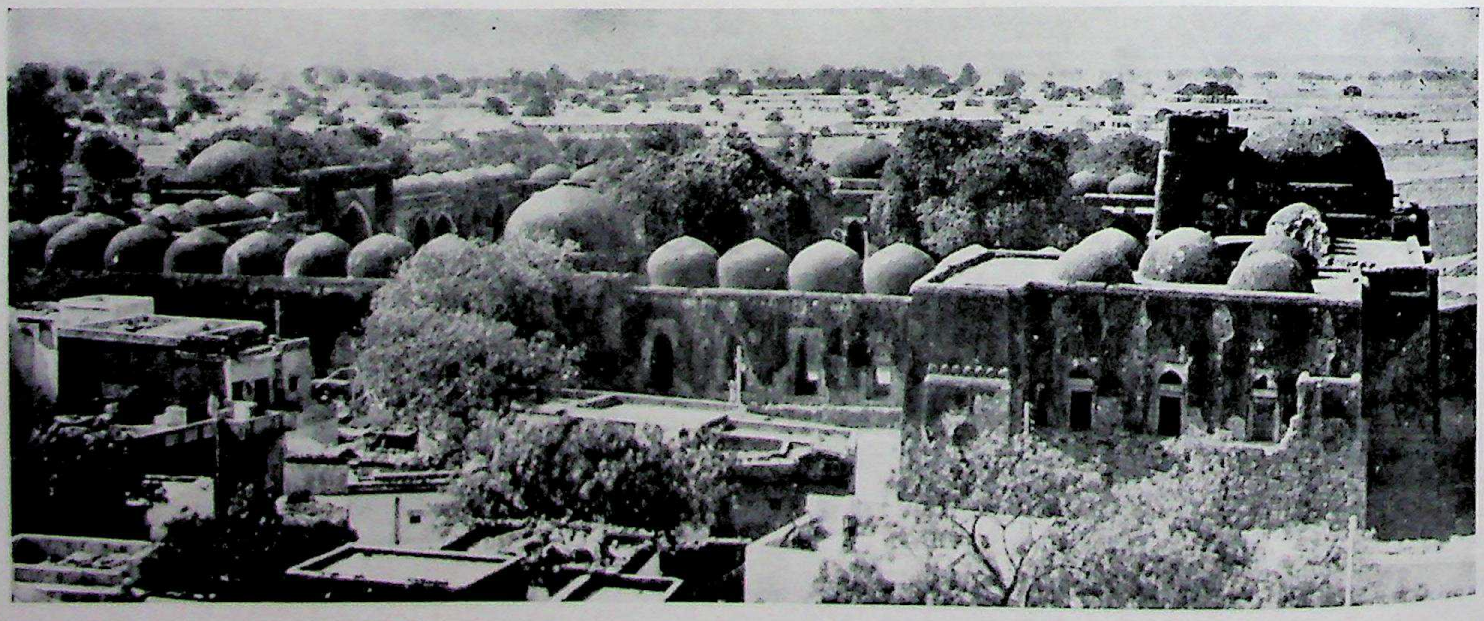
14. Jami mosque, Kotla Firuz Shah.

15. Begumpuri Masjid.



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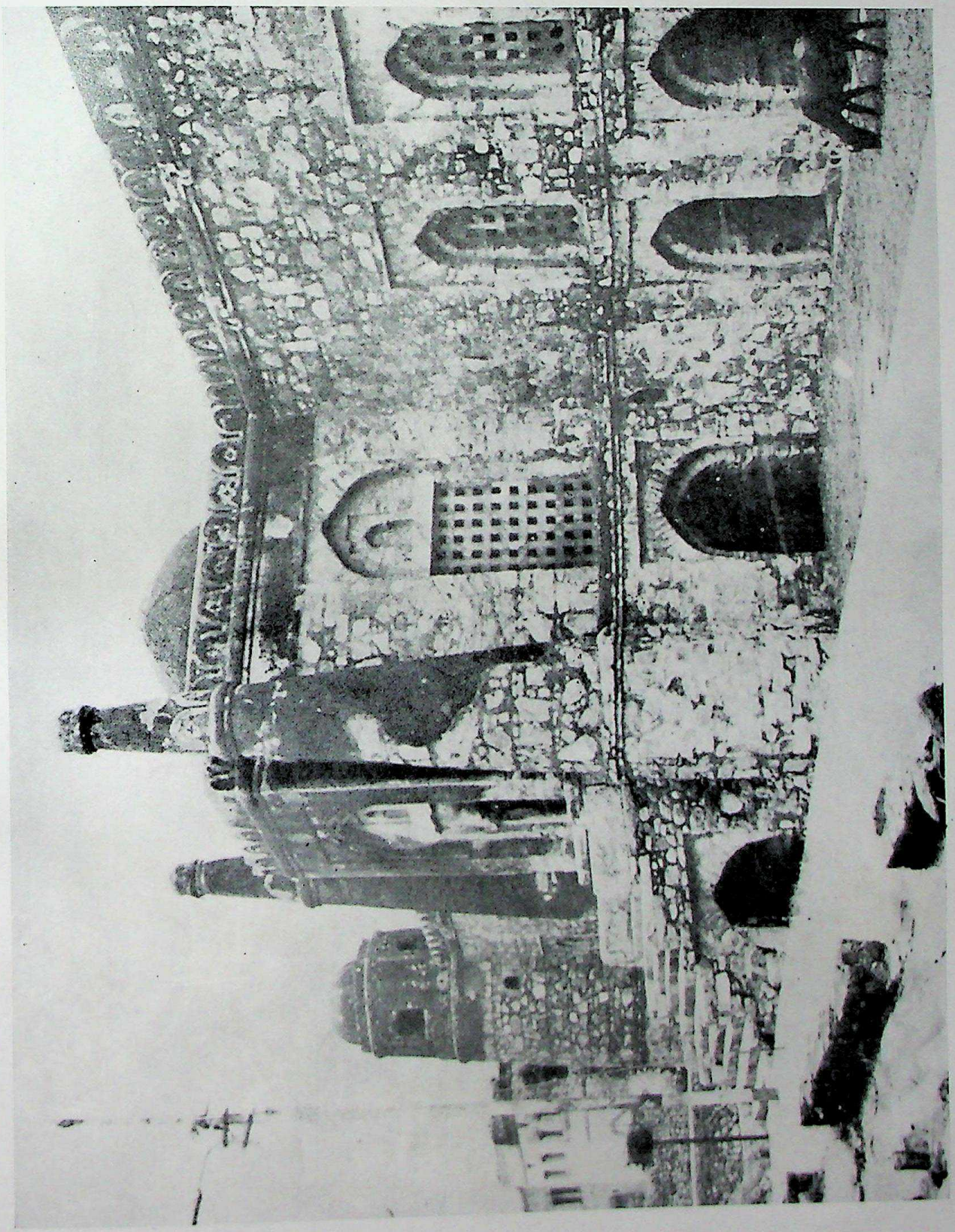

16a. Khirki Masjid entrance.

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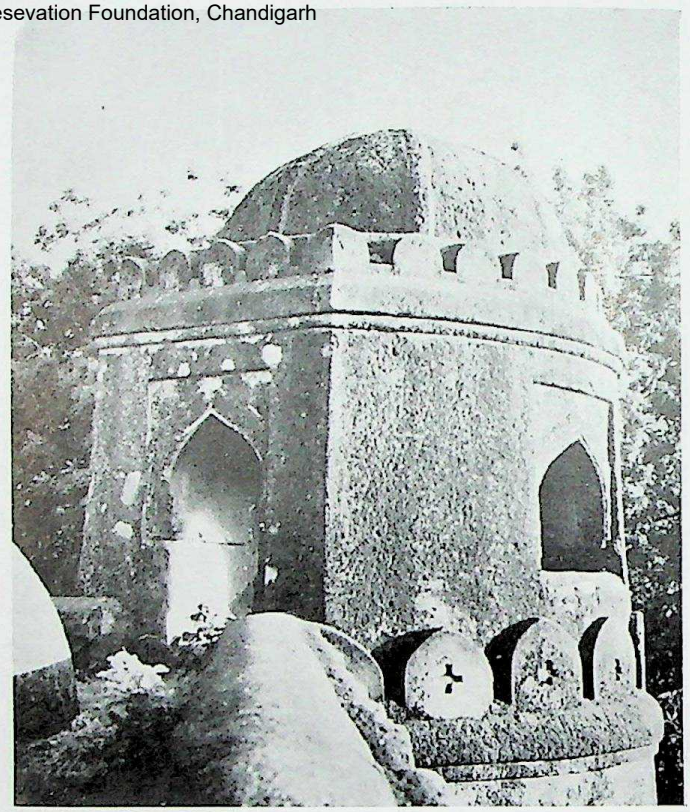
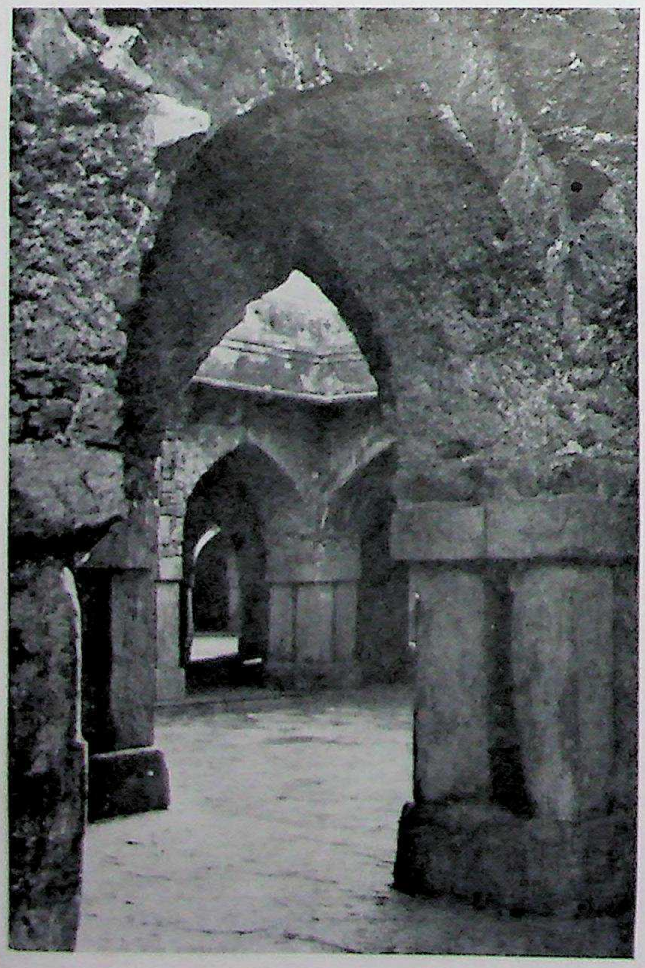
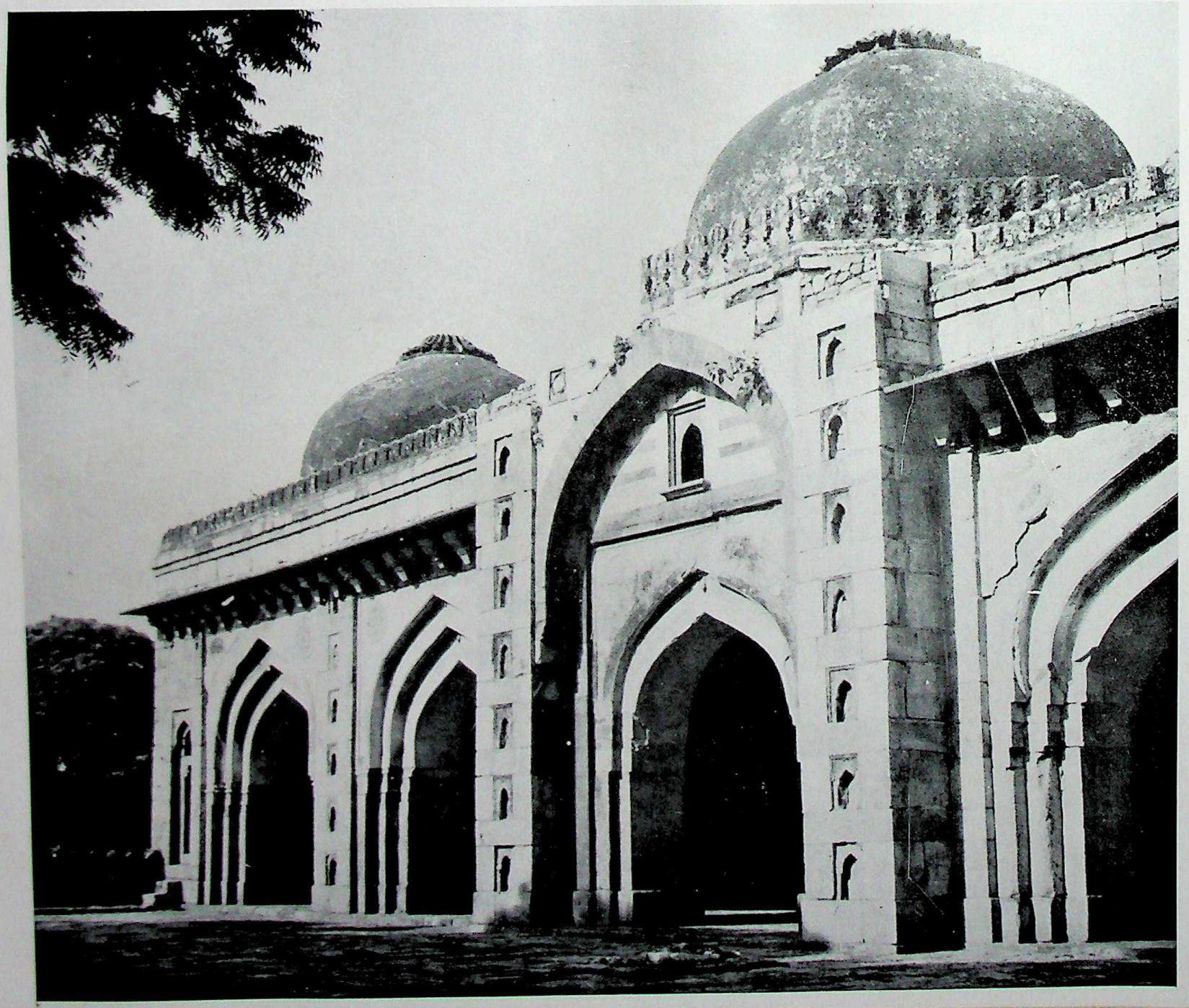


16b. Khirki Masjid, staircase dome and its placement on buttress top.

16c. Interior quadrangle through arch, Khirki mosque.



17. Moth-ki-Masjid, facade.



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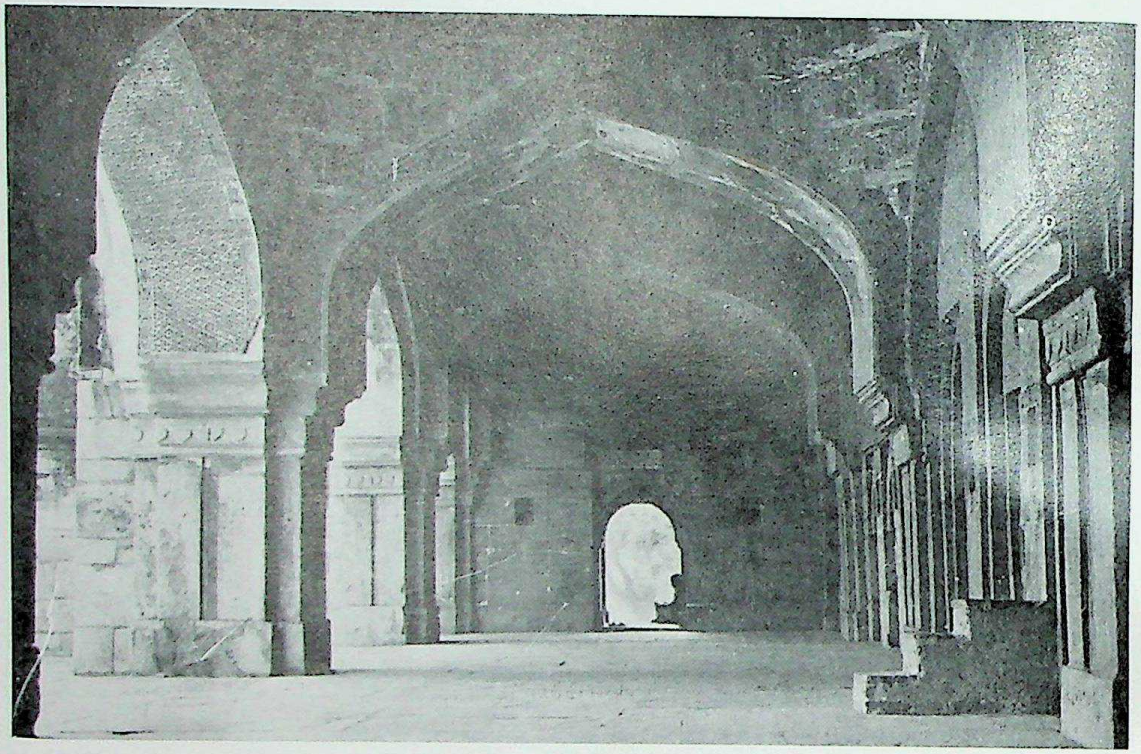
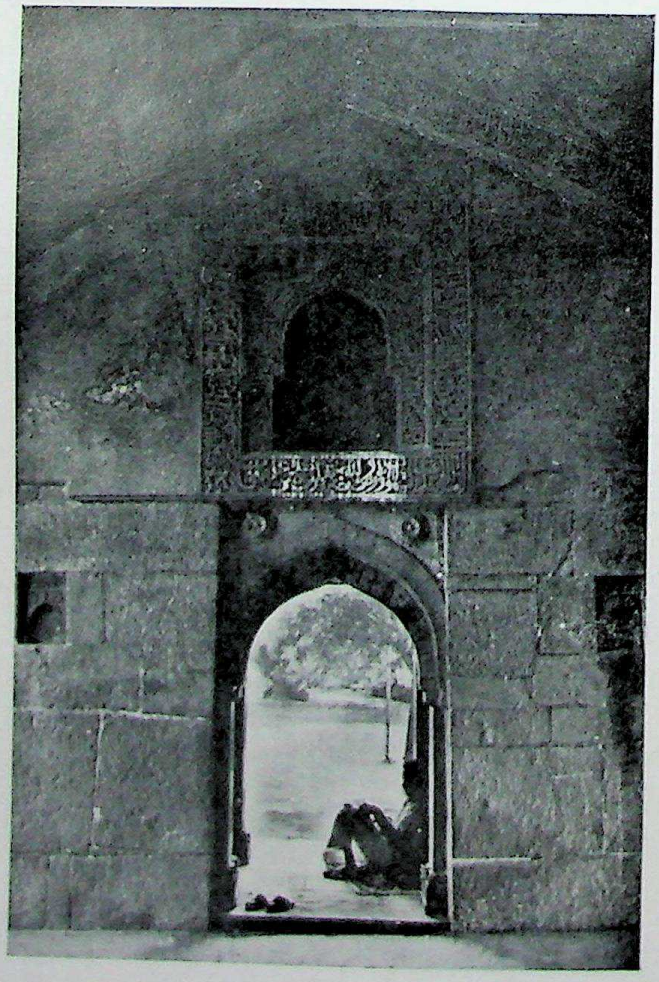


18a. Bara Gumbad mosque, Lodhi gardens.

18b. Bara Gumbad, side wall detail.



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Three

Early Imperial Articulations

Early arch

The arch, dome, vault and the *minar* are admittedly taken as the essential elements of the Islamic style, incorporated in square, octagonal or rectangular layout. The use of arch was certainly in vogue for a long time in Asia Minor and Europe, before the advent of Islam, although it received its classic distinction later mainly in the Gothic and Tudor cathedrals. The arch, as normally understood is essentially a timber and tile prototype to which the use of plaster or mortar had added a certain flexibility and versatility. The wood and tile arch had been already a part of Buddhism and early Hinduism since long, but it would be relevant to add quickly that no arch, in its true principles of the *voussoires* and the key stone, as employed in the Islamic mode, had been in vogue in other earlier modes in India. It would be equally appropriate to state that the astylar corbelled arch which stone architectural Hindu-Buddhist tradition used time and again, was also an easy and universal way of spanning, especially when the arch is only a free-standing screen but certainly in other interior contexts also wherever necessary, and had, owing to this universal common tradition, been used in Islamic architecture in India also from Qutbuddin Aibak right down to Shah Jehan and even later. The real crux of the problem is the load-bearing function and the design element of a structure. In buildings which do not carry superincumbent load, the astylar corbel principle is the most satisfactory. Besides, as long as the load is mainly of stone and not any core mortar or hearting material, the astylar arch can also be carried to its logical extension for achieving a high elevation, as in the *Jagmohan* towers of Orissa and thus the fully stone-using *penchant* is at the root of it. When a hearting or core-filling is involved to give a thickness to a wall or superstructure, then the climatic impact on that material may cause distortion of the volume and thus the true four-cornered arch is more effective. Where only a load of stone pile is either bonded or securely distributed in its design, then, the climate is a less overpowering factor but vegetation or seismic disturbances may totally distort it. Even these seismic or vegetation factors act with less injurious effect on a structure of four cornered arch principle along with a true native laying and bonding in mortar for core and plaster, and at best tries to escape, creating a vertical irregular crack of varying cleavage on the monument. This is why Islamic monuments, under normal circumstances, have stood the test better, unless deliberately neglected or damaged. For the same reason, in an area where the effect of either vegetation or earth tremors is less likely, due to an even climate, stone structures even under Islamic mode had followed the corbel, lintel, astylar arch principle, as in the magnificent Fatehpur Sikri palace and other buildings which are standing even after 400 years of relative disuse and nominal up keep. In West Asia, where either

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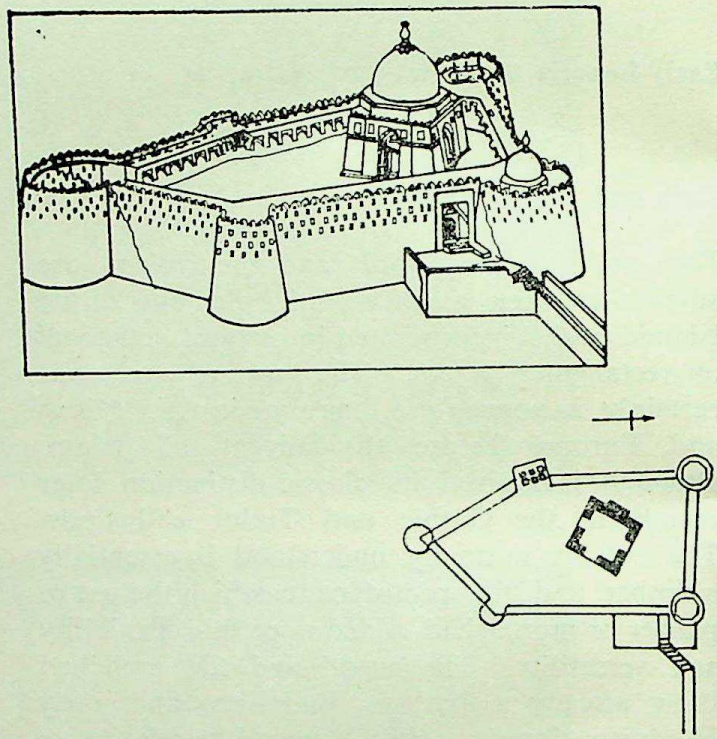
28. *Ghiyasuddin Tuglaq's Tomb complex, Tughlaqabad, Delhi*



extreme heat and desert conditions, as in the south of it or cold temperate conditions as in the north, were involved, an arched principle and a dome had served better—all the more so when stone was scarce or only mortar and brick constructions were traditionally current. Even the Tudor cathedrals with their steep exterior slope were a primary safeguard against cold conditions and thrust of snow and sleet. Thus, when Islam started building in India, it was aware of these and used astylar arches where screen walls were involved as in the *maqsura* of the Qutb mosque (Jami Masjid of Mehrauli), but when regular mortar and undressed stone constructions were expanded, it introduced the true arch principle, allied with the squinch device. It is not appropriate, therefore, to conclude that in the early part of the Slave dynasty, the true arch was *not* known or seen, but we should only deduce that with the type of construction made largely out of pre-existing temple materials and with the local artisans (inducted into these jobs rather hesitantly), the use of the arch was deliberately felt unnecessary and was not therefore introduced in the earliest stages, all the more so when in these earliest stages mortar was less used than in the succeeding Khilji and Tughlaq periods. To that extent, it may also be appropriate to say that the period between Qutbuddin Aibak and Balban, not to mention its totally disorganised political conditions, had been the 'transitional', and not the 'formative' stage in Islamic building craft in India. It is thus in Allauddin's buildings, for the first time, not only is the exotic Islamic traditions as borrowed or imbibed from the Seljuks more emphatically displayed, as in the Alai Darwaza, but also becomes a landmark and the inception of the true Islamic architectural exercise. We should do well at this stage to linger for a while on what has been largely taken as 'Balban's tomb' just outside the city walls of Qila Rai Pithora. Before we do that, we may consider what had been found before and after the period of Balban, in the matter or arches found in the following monuments especially.

1. Alai Darwaza and *madrasa* and tomb of Allauddin, Mehrauli.
2. Jamaat Khana Masjid, Nizamuddin.

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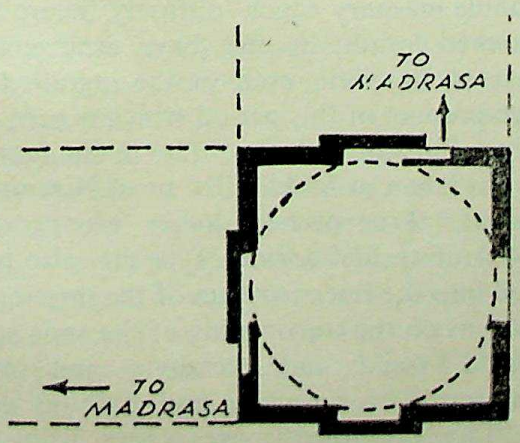
29. *Mausoleum of Firoz Shah Tuglaq, Hauz khas, Delhi*

3. Ghiyasuddin Tughlaq's tomb, Tuglaqabad (fig. 28).
4. Firuz Shah's tomb at Hauz Khas (fig. 29).

We may remark here that the touch-stone of assessment of an arch is more effective when the arch is made of *masonry* (rubble stone or brick, as the case may be) than when it is a cut-stone work or mere veneer stone. The reason is that the former is the original and the *prototype*, while the latter is its *transfer of technique or translation* in a harder material, not calling for any new functional enunciation. To that extent, we may say that, in the first two instances, these arches may have to be compared and correlated with their contemporary masonry arches before any conclusion is drawn. The *style* of a construction which is, in other words, a superficial embellishment to the *technique*, in order to make it aesthetically satisfying, may therefore tell us information only about the *source* of the authorship of that *style*, but not necessarily the original source of the basic *technique*. The first two buildings are taken as drawn from the *Seljuk* style of Asia Minor in the ancient city of Koina, the capital of the Seljuks of Rum, in the first centuries of the second millennium after Christ. If we compare only the *style*, we draw conclusions mainly about the status and capacity of the master craftsman who laboured on these structures. But when we talk about the *technique*, we are ascribing them invariably and universally to the most ordinary among the professional local craftsmen for whom it should have become a pretty familiar mode of erection. Thus, we should do well to examine the ordinary structures of Allauddin's times in Mehrauli and elsewhere with the ordinary structures of Ghiyasuddin in Tughlaqabad and the ordinary technique clearly manifest in Firuz Shah's mausoleum at Hauz Khas, and correlate it with the special structure of Alai Darwaza and of the Jamaat Khana mosque and of Ghiyasuddin's tomb; and then compare the entire deductions with those seen in the so-called 'tomb of Balban'. Where, however, a very large number of structures of various kinds have been erected at different places, as in the Mughal period and where there is dynastic continuity, as in that period, it is feasible cogently to trace the evolution of the *technique* as well as *style* as largely an integrated entity, especially since the integration of mortar and veneer, under ideal circumstances had itself been



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achieved in the Mughal period. Such a methodology, should be relevant for other creations on the regional style also, where the undercurrent of the technological status of the craftsman is easily identified, as in the case of the Gujarat Sultanate; or where the traditionally brick, bamboo and terracotta art is well accepted, as in the early Bengal monuments of Islam, or where the situation as found in pre-Mughal architecture was also part of an experience, as in the Adil Shahi architecture of Bijapur. But in all other cases, *technique* and *style* should be separated in the identification of the character of the basic structural mode or device, so that the establishment of the usage of the device is unquestionably arrived at. Reverting back to the nature of the arch under Khiljis and Tughlaqs before the end of the 14th century A.D., we find that while the keystone of the arch is mainly in true form in masonry arches in mortar, the crest of the arch itself shows a vertical joint, cutting the keystone in two parts, though together in proper keystone shape in cut-stone work, as seen in Alai Darwaza, Ghiyasuddin's tomb and even in slightly later structures.

Two usages of the keystone are seen simultaneously and extensively, the keystone being seen, in each case only in rubble masonry in mortar constructions. Thus, we may take it that the cut-stone workmanship shows the *style* of keystone, but the common rubble masonry shows the *technique* clearly prevalent at that time. If we compare this with that of the so-called 'Balban's tomb', we should be able to see the difference. Further, in 'Balban's tomb', as now fully cleared of its debris, we find that original level had been considerably raised, an adjacent porch structure appended a little later, as shown clearly in the joinery; the height of the arch is rather too high from the original working level both inside and outside, such as is found generally only in later Tughlaq and early Sayyid times. We will come to the other important features of 'Balban's tomb', now. We do not find any ornamentation which was available immediately before him and just after him. Balban's times were noted for their peace and order. It is debatable whether his own tomb should have been in such an incoherent and simplified manner, if it was built during his life time. If built after his death, it is even more inexplicable if the style so evocatively seen in both Iltutmish's expansion of Qutb mosque, his creation at Ajmer and in Sultan Ghari would not have been reflected to Balban's times. It is also to be seen that even Ghiyasuddin Tughluq's tomb shows purposeful ornamentation. How only during Balban's times, this *penchant* was discarded will also be a mystery. We will refer thus to the fragmentary remains of pre- and post-Balban time seen in his tomb itself, further down.

Arches—True and False

True arches become less and less evident; and rubble masonry which diffusely incorporates the arched vault in the bay arrangements, whether of the plain arch or the engrailed arch is a bye-product of this period which is seen from Delhi to Punjab and Sind (as in the tomb of Mirza Isa Khan at Makli hills or of Nizamuddin at Thatta). True arched domes whether of the spherical or apsidal dormer type are also incorporated into the linear rhythm of the interior and exterior, as on the top opening of the stair *minars* of Khirki Masjid; and rectangles and smooth curves prevail over squares and bulbous domes stand all too prominently over a high drum. The

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double-dome, already begun in the Lodhi times, gets its inevitable suppression in order to fit it into the basal volume of the structure and basal expansiveness, rather than as a strident vertical projection, and becomes the order of the day, from the end of the 15th century. Surface ornamentation of walls in the central Mughal period was a *regimen* of painted and cut plaster traditions rather more than structural traditions and this was a direct continuation the assured brick and stucco plaster outlook of the Perso-Mughal school. The Bijapur school of the Deccan in the late 15th to 16th century, as in the Jami Masjid in that city, and in the 17th century, as at Gulbarga (Darga of Banda Nawaz) copy this tradition, although the developed Bijapur style in the 17th century is an admixture of many ingredients making the respective monuments, starkly distinctive from one another, as between Gol Gumbaz or Ibrahim Rauza, on the one hand, and a typically pre-Mughal elevational ponderosity and the elegantly linear rhythm of the Mihtar Mahal (both interior and exterior), Gagan Mahal and water pavilion of the Adil Shahi—times which are as much the Turkish, as of the Safavid Persian outlook of West Asia.

The Qutb area gives us the summarised structural situation of the building craft in: (a) the mosque screen (Pl. XIX A to C), (b) arched entrances, (c) domes where existing, including their interiors, namely the ceiling, with its squinches; and (d) the secondary false arches or windows on the walls or screens, variously. Regarding the first, in all the extant examples of the screen-arch, there is a slight radial convergence of the uppermost courses of the jambs of the screen and near the topmost level a few large slabs carrying the cut-out line of the top *ogee* of the arch abut on each other, forming the crest of the arch (Pl. XX). In some cases, totally monolithic carved pieces representing both sides of the top of the arch are simply fitted on the top most part (Pl. XXI) as a functional weighting upon the coursed constructional lower parts as in masanry building and this is also the case in all the arched openings of Sultan Ghari. On the other hand, on the small arched niche carvings lower down on Iltutmish's extended *maqsura* screen, we have purely horizontal courses right upto the top, running through the niche arch in each case. Similarly also on the windows of the Qutb mosque outer extention wall on the south, just behind Qutb Minar, and abutted by Alai Darwaza, we find a linear astylar designing seen on the courses of the window arches. When we come to arched entrance cubicle over the steps as for the Qutb mosque and the Qutb Minar, including the design of the ventilator arches inside the *Minar*, we see that the same principle as is followed on the crest of the Qutb-Iltutmish mosque *maqsura* screen is studiously employed, in the form of large, carved abutting slabs forming the *ogee* right through the width of the arch-top.

When we take up Alai Darwaza, as a whole, we see *three* different principles integrated in the layout. Firstly, is the open curved flat-arch principle with carved and beaded edges as on, the northern exterior entrance projection of the Alai Darwaza (facing into the Qutb mosque) with the ceiling just within understandably flat. We have the three main arched entrances leading into the Alai Darwaza (which are built rising from the ground level outside and integrated with the inner cloister level of the mosque, at its inner floor level). We have here the Seljuk type of cusped dagger tip-edged arches which are reasonably clearly following the *true arch* principle,

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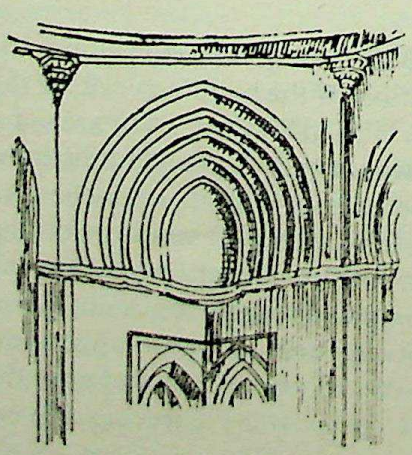
30a. *Squinch at Alai Darwaza, Mehrauli, Delhi*

but even here the key stone has an inverted 'V' shape, thereby suggesting that it is only a logical but competent abridgement in a true arch of the Qutb mosque screen crest, to the minimum, indicating how the keystone principle visually emerges *actually* at this place. On the cloister immediataly within the Alai Darwaza on the walls supporting the ceiling slabs of the cloister, a squinch of double bracket scheme is used in three courses, the lowest carrying the ornate knob which is an abridgement of the knob-bottomed squinches, seen within the Alai Darwaza itself for its dome base. Thus, we may see that certain stages of transition between the arch of the astylar type and the arch of the Seljuk arch type are eloquently displayed in the Qutb mosque complex itself, placeable in time range between the time of Iltutmish and Allauddin Khilji for the entire development. The squinches of Alai buildings in Qutb area have themselves three different prototypes—all constructional—two of which are seen in Alai madrasa and tomb area, and the third in Alai Darwaza interior, not to mention the tomb of Iltutmish itself. These are respectively the alternately wedged and flat stone-coursed squinch and the concentric arched pendentives and squinch. This latter is nearer to the squinch of Iltutmish's tomb (1236), where the corners of the arched diagonal support carry a simplest squinch dome of annular type in the quoins, which is improved with additional squinch brackets in the junction between square and octagon courses; and in the Alai Darwaza (1311) where, however, the simple squinch brackets on the base of octagonal and circular part occur, the quoin itself is neatly integrated by the half-dome concentric pendentive squinch. This is almost the same as is followed in the Jamaat Khana mosque of Nizamuddin (1320). Thus we see that while the two latter, namely the Alai Darwaza and Jamaat Khana form one stage, those of Iltutmish's tomb and Sultan Ghari are an antecedent formative stage—although only in a constructional sense. It is also considerably a successor to the *maqsura* (screen) arch stage, of the Qutb-Iltutmish phases. The Alai Madrasa (Pl. XXII) and Allauddin tomb-complex, however, follow a different scheme which is more in tune with the squinch introductions seen in Tughlaq tombs in Delhi (1320-24) with wedged and plain alternate coursed bracket below the squinch (fig. 30a and b : Pl. XXII). Unfortunately, we have no extant features of the Allauddin's tomb *above* its walls for detailed comparison. One would consider that Alai Madrasa, which is said to have fallen



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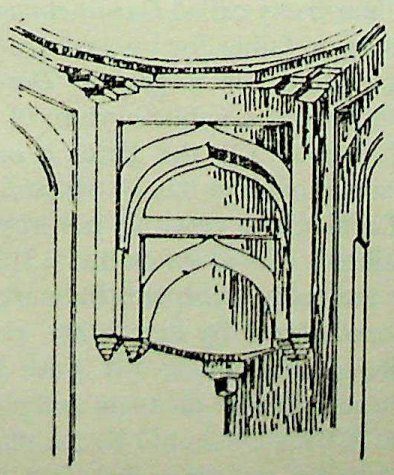
30b *Squinch of Tuglaq tomb, Delhi.*

into ruins and to have been 'rebuilt' by Firuz Shah Tughlaq, should, on this reason, make him responsible for the type of squinch features introduced there. These squinches have both simple wedges as well as concave spherical triangle' wedges available. The domes over Alai Madrasa chambers also hardly compare with that of Alai Darwaza's dome and have a higher rise and greater volume and are seemingly Tughlaq models. Thus, we distinguish basically Iltutmish, Allauddin and Tughlaq stages in the Qutb mosque complex—also with all the internal corroboration of *in situ* evidence and the contemporary chronicles, but we surely do not see any 'Balban' stage. The matter becomes piquant when we compare the dome and arch of 'Balban's tomb' with that of Qutb mosque-enclosure, as marshalled above. Here the squinch is entirely different. This is indeed a developed Tughlaq device (one stage even later to Mohammad Tughlak's phase in Jahanpanah) and could not have been, therefore, part of the erection of the tomb after Balban's death or just before it, notwithstanding the fact that the grave site could indeed be of Balban and the venue itself could very well be that of *Dar-ul-Aman* (said to have been located outside the city walls of Qila Rai Pithora) within which Balban was buried the day after he died. Here again, contemporary records show that Firuz Shah repaired *Dar-ul-Aman* structure. The plaster work of the exterior walls of the tomb carry fine-cut plaster ornamentation of floral medallions, etc., and even blue glazed tiles sticking here and there—which were not recorded earlier to the time of Balban in the then Delhi. An interesting feature in this much harassed, ruined structure is also, besides, the mild batter of the side of the entrances, adjacent to the tomb, the style of building a larger arch and putting the dome on it by screening the upper arched pendentives on the corners with a lower smaller inset arch and providing a single wedge at the base. The arches of the attached chamber carried sockets seen even today in the now broken masonry and intended for inserting crossbeam at the springing level. This is a typical Tughlaq device from the time of Ghiyasuddin Tughlaq's tomb onwards, and is hardly to be seen before that period anywhere in India in Islamic monuments. Thus, we are led to presume that while Balban was certainly buried at this place, the construction *above the wall level or even parts of it*, were the large scale repairs of Firuz Shah Tughlaq. Some sandstone pavements and jamb details, with 'pillar-and-pot' motif at their base seen on the northern entrance of the tomb, seem to be of clearly Allauddin's times typically (as noted in Alai Darwaza, etc.) and similarly the



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introduction of some marble slabs on the eastern entrance exterior landing itself, also supported on the corners by the 'pot' motif pilasters, could be either of Allauddin's time or early Tughlaq time—more probably the former—and this adds one more dimension—namely a possibly earlier Khilji stage also, besides large scale Tughlaq repairs to Balban's tomb. On top of everything, the southern entrance of this original *Dar-ul-Aman* (fig. 31) enclosure is a most persuasive Firuz Tughlaq creation, including its pyramidal dome—a touchstone of Tughlaqi *penchant*. Incidentally, there is also another aspect of the matter, as recorded in *Futuhat-i-Firuz Shahi* that, in expiation of injuries inflicted by his lord and soverign, namely Mohammad Tughlaq, Firuz got the people so punished duly provided with financial help and the documents registering these actions of his were collected by him and placed in a chest at the head the grave of Mohammad Tughlaq located in *Dar-ul-Aman*—as a pious act—for protecting Mohammad's body to rest in peace. It is generally claimed that Mohammad Tughlaq is buried inside Ghiayasuddin Tughlaq's mausoleum at Tughlaqabad. Some scholars have been even holding that *Dar-ul-Aman* is to be identified with the structure of the same name in Ghiyasuddin tomb enclosure in which one of his young son's graves (who predeceased him) occurs. This raises the issue again, but clearly in the mind of Firuz, the *Dar-ul-Aman* referred to by him was the glorious asylum area instituted by Balban and not the *Dar-ul-Aman* (imitatively called so in a royal grave enclosure of Ghiyasuddin complex in one of the corner bastions and there is only one more earthen grave there which is attributed to Mohammad, by the above view point) and this does not go with the date of Lal Bangla (Kabiruddin Aulia discussed earlier). We are able to identify *Dar-ul-Aman* of Balban clearly now as a specific structure associated with Balban's tomb site., as repaired by Firuz Shah on his own admission and that is where, we think, the issue should rest for some time.

As regards the 'true arch', therefore, we have every reason now to conclude that this emerged only in Allauddin's time, as implicit in the developments of structural devices noted in the Qutb enclosure itself (Pls. XXIV A-C) explaining the stages of the development of early arch in the Mehrauli monuments complex), and was pre-Tughlaq in any case and post-Iltutmish. Whether Balban should indeed be saddled with the credit of having expounded it—without any tangible evidence that can be actually cited *in situ* is quite debatable and the credit should clearly be accorded to Allauddin.

The *Dar-ul-Aman* mentioned in the inscriptions found in the octagonal chamber to the north east of Ghiayasuddin Tughlaq's mausoleum in Tughlaqabad area, containing the burial of this young predeceased son thus cannot certainly be the *Dar-ul-Aman* which Firuz mentions, because: (1) the former was only figuritively called *Dar-ul-Aman* by the doting and grieving father for his favourite young son, but cannot stand for a generic *Dar-ul-Aman* of Balban, which was a public asylum of varied categories of people; (2) the latter is only a private mortuary chamber and has no scope for entertaining non-Tughlaq and certainly non-royal personages, as Balban's *Dar-ul-Aman* had; (3) If two *Dar-ul-Amans* are to be accepted, Balban's one should not be overwhelmed by any other private place, also called *Dar-ul-Aman*; (4) since Balban was clearly buried in *Dar-ul-Aman* and since Balban's tomb (pls. XXVA-C) should be the place now called by that name, and since there is a finite rectangular enclosure around Balban's tomb, and since,

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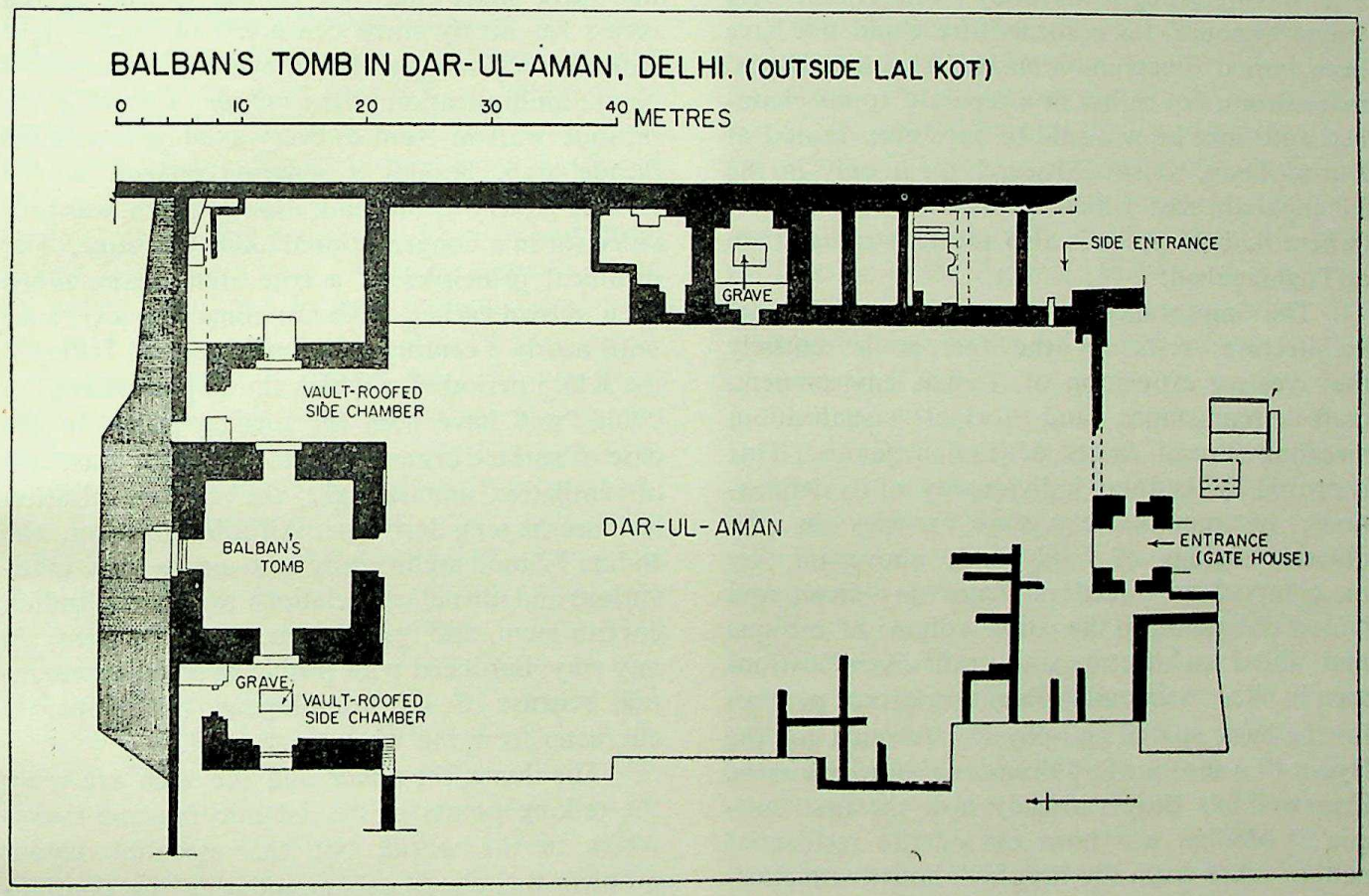
31 *Dar-ul-Aman, in Jahanpanah, Delhi.*



as already explained, it is full of evidence of Tughlaq and especially Firuzian stylistic evidences in architecture, that enclosed area merits clearly to be the original *Dar-ul-Aman* which, incidentally need no more be considered as 'untraceable'; (5) the spirit of Firuz Shah's association of Mohammad Tughlaq's grave with *Dar-ul-Aman* cannot be relevent to the chamber in Ghiayasuddin mausoleum premises, but only with that of Balban's, since at that spot, even the inveighlers of Mohammad Tughlaq could not have any chance to desecrate his grave, against his own cruelty. This is what should have indeed impelled also Firuz to purchase pardon for his patron and predecessor, by the burial of the chest with donative documents. It is even likely that the pyramidal roofed structure in front of Balban's grave at a distance could have been the mausoleum of Mohommad Tughlaq as, obviously

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after having brought his body from Thatta with 'royal honours' (as recorded) he could not have been buried unceremoniously at some shared mausoleum, but rather in a separate tomb chamber, and since he was said to have been buried at *Dar-ul-Aman*, we should search for it only in the Jahanpanah area which is his own capital city (where Balbans grave is also located) rather than at Tughlaqabad.

The importance of the corpus of Islamic architecture rests on the fact it is entirely the creative exposition of Indian environment, craft circumstance and formal visualisation, revealing several facets of Indian genius. This is proved by the total individuality of its delineations, its remarkable visual varieties in the different regions of India and, above all, by its comparative freedom from any direct and liaised obligation to the whole volume of mosque and allied architecture and craft diversifications seen in West Asia and Asia minor, except perhaps for the basic spatial and physical formula for the layout of a mosque and occasional intrusive ideas. Cresswell has shown already how the first mosque at Medina was born out of the residential pattern taken from the Prophet's house with cloisters all around and the position taken by the Prophet on a short trunk of palm tree—like a later *mimber*—from where he used to give his exhortation on the new faith and god-identity, besides ethical and moral values, founded in the new religion expounded by him. Even the first mosque in India, empirically based on the original tenets, came nearly three to four centuries after the formulations, in massive architecture, of the mosque pattern in West Asia. We also see that while in West Asian mosques, the *qibla* or the religious orientation of the mosque is essentially designated by the back wall of the prayer chamber and did not have more than one central *mihrab* curved recess for nearly three centuries, in India, right from the beginning and in later times, a very deliberate multiplication of the *mihrab*, all along the mosque wall in front of every axial bay or of the facade arch, besides a separate *mihrab* for the *Zenana* gallery at one end, usually north, was provided for in a congregational (*Jami*) mosque. The technical principles of a true arch, again, as has been shown earlier, have not come into existence until nearly a century of formulations in India, in the Khilji period—for which the Seljuk inspiration could well have been the turning point. In the case of surface ornamentation and certain aspects of ventilation and skylight, the same inspiration has also be seen derivable. All told, however, the Indian Islamic architecture rests on its own motivations and formal enunciations to suit the Indian environment and genuis, and had not been, in any way, burdened with problems to be surmounted, because of its homologous but disparate character from the West Asian pool.

The dome, the *minar* and the arch are truly the talking points of the Islamic mosque everywhere in the world, but the essential layout problem was one of accommodating the continuing and increasing number of votaries for regular as well as special prayers, as in an open *Idgah*, with a wall mosque screen, with reference to the inhabited complexes of the city or towns, whether fortified or otherwise. The distribution and locations of the congregational mosque would show that they were having a utilitarian view point for the crucial parts of the city, whereas private mosques for the royal as well as the lay followed a varient pattern of location and distribution. It became axiomatic that every town must have one large *Jami masjid*, at least a few private mosques and one *Idgah*. The presence of a large number

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of Hindu and Jain temples, which in the initial stages of its establishment the Islamic political powers of India were inclined to destroy or incapacitate, was also slowly gaining acceptance, in a spirit of co-existance at least from the time of the post-Sultanate stage, and certainly from the Moghal times, and this should have indeed given a deliberate spurt to a conscious expression and beautification of the Islamic religious structures, almost in a competitive spirit. Thus the monopoly in Islamic religion that exists, as a fact, in West Asia and that was forcibly inducted into the Indian scene also in the early centuries, had given place to an intellectually accepted inter-relationship between Islam and the other indigenous religions of India, to such extent that Islam, in its turn, virtually become also an indiginous religion in India, after its formative phase, continuously seeking parameters of cross fertilization in art and co-existance in life. Already Sufi saints who had come to India in the 12th century had fertilized the soil for this. These clearly show that Islam in India had an organic function related to Indian society with which at least it had a differentially permeated context, in the developed stages from the 15th century A.D., notwithstanding simultaneous political aspirations and control. It is this that makes Islamic architecture a prestigeous inter-continental complex of art formulation, in the world perspective. A parallel to this can be seen in the Buddhist architecture of the South Asian countries, where this 'adopted' faith had been elaborated by architectural and art creations which have assumed an independent status—in comparison with the models and parameters that existed for Buddhism in the original contexts in India itself—from which surely these countries derived and continue to derive this faith and inspiration.

The organisation of the *mihrab* had also been undergoing various forms even in West Asia (see chart) The recess of the *mihrab* had been mostly pentagonal (or octagonal and circular rarely) and the exterior projection on the back side had been either circular or rectangular—the latter only from the end of the 11 century A.D., as in the mosque of the Fatimid period at Juijushi. We have quite a few examples of the pentagonal type of *mihrab* recess in the Bahmanid monuments, as in the Sola Thambha at Bidar, or in the early Moghal times, as in the Patthar masjid at Srinagar. But, by and large, the West Asian mosques of most periods had been confined to only one *mihrab* in the centre and rarely more than that. Even then, these are immediately adjacent to the central one on either side, as in the great mosque of Baybers (1267-69). Indian mosques would seem to derive the tradition for multiple *mihrab* usage from that of the mosque of Ibn Tulun at Cairo (*c.* 876-79) which has three niches, or the Medina mosque at Zahra (Spain *c.* 941 A.D.) which had five *mihrabs*. The use of the *Zenana* gallery, either at the ground level (as in the later phases) or in a floating mezzanine gallery at either end or at one end, as in the Tughlaq times, also had no firm structural counterparts in West Asia. Thus, multiple *mihrabs*, *Zenana* gallery, rectangular projection on the rear side of the central *mihrab* behind the wall (which in Tughlaq times had also a curved top, as seen at several residential and sepulchral mosques at Delhi as well as at Multan), the insistent provision of '*wazu*' pond (whose waters are said to simulate *zamzam*) are all India traditions in Islamic architecture. They show how the building styles of Islam in India had no great obligations, other than the religious sanctity and emulation in general layout plan, to the West Asian mosques of

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earlier times, and had been steadily evolved out of artistic, functional and structural needs realised in India. Similarly, the absence of any domes, for the earliest mosques over their prayer chambers, and others restricted often to the western sides of the mosque enclosure only, without any on the side-cloisters all around, the introduction of both mosque and mausolea in front of each other, as in the monuments of the Gujarat sultanate, are all other indigenous formulations.

The beautification of a tomb under Islam is sometimes criticised as against the spirit of Prophet's teachings, but it could be seen that even from remote times, 'megalithic' burials had normally this outlook of monumentalising the sepulchral spot and had by their entrenched provenance in West Asian protohistory seemingly played a role in the evolution of tombs in west Asia for dead people and their elaborate organisation. It depicts more an ethnic and metaphysical bias, and had been an inextricable part of the societies practising it.

Purists of indigenous Indian architecture appear also to consider Islamic art as having 'developed under court patronage, primarily beneath the warning eyes of the overbearing *ulema*'. It was said to be an "accretion without such secure foundation of well defined and well tried principles, technical and philosophical, as are met with in Indian art", that Islamic art has "no philosophy and no symbolism; that it is what we see of it, pure and simple, an art of colour and an art of line; that Islamic art as we study it prior to its introduction in India is essentially the art of decorators and ornamenters".[1] It is also being suggested that Islamic mosque architecture was itself frowned against by the Prophet—who was only against idolatry—and was furthered by the *Hadith*, against the true sprit 'of the secular teachings of the Prophet, and that while destruction of image worship was seriously taken as a tenet of faith by the conquering invaders and early Sultans, it could not be any excuse for their breaking even sculptural carvings in temples which were merely 'works of art' and thus in damaging them, Islam was only showing a negative attitude while, even in West Asia, carvings were seen in mosques also'.

The least that can be said, in the first instance. about this type of reasoning (as cited above) is that it tries to oversimplify the issue and stultify the onrush of a large-scale historic movement in buillding art, spread over an overwhelmingly large part of Asia and India, by denying to it its own accomplished destiny which is now part of history. It is totally irrelevant to aver that Islamic architecture was the 'art of decorators' or had no well-defined symbolism or philosophy. Indeed, there is no architectural *milieu* which is more comprehensively of prescribed formal and compositional slant, as was the body of Islamic constructions. For nearly a millenium, it laboured

[1]History of Sultanate architecture-R. Natha Delhi (1978).

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hard to produce works which reflect a rhythm in structural form, shorn though of any representational elements, and was virtually a substantiation of an *ethos* with an admitted bias towards secular ideals. It would be more appropriate to say that Islamic architecture strove essentially to create 'residential' models for divinity, which can breath the air of spiritual elevation as houses of God. Seeking to have a 'kingdom of heaven' through such mansions of god on earth was certainly not the traditional bias of Islam *alone*. Even Hinduism, which, in its highest ethical-philosophical doctrines of the Upanishads and further in the *Advaita* Vedanta and the *Pratyabijna* school of meditational Saivism of Kashmir, disputed the need for representations of God (and making them equivalent to God Himself) not only ambivalently produced an *Agamic* mandate for such creations but also considered it as an act of piety to erect temples. Further, sculptures in Hindu temples were never dissociated from the totality of the structural concept of the temple and are certainly not mere 'works of art'. They are *works of religion.* Vedantic monism and *Bhakti*-based pluralism of forms, including those of divine and semi-divine carvings, if they could co-exist in Hinduism, shall certainly not be cavilled at, if, in an essentially hieratic scheme, they became the taxonymic parallels in Islamic architecture and its religious base, in the form of non-representational motifs. Destruction of Hindu idols was certainly against the better judgement and understanding of humanity 'to live and let live', but this tyrannical act should not blind our eyes towards an advocacy of a superiority of logical formalizations only in Hinduism and its bankruptcy in Islam. Islamic architecture, as it rose out of nothing in India, garnished and intermingled with indigenous craft *penchant* and stimulus, was only persevering to achieve an individuality of form and filiation, which is the hallmark of every religious architecture. Even in the acrimonious quarrels between Jainism (a seemingly pacifist faith) and Hinduism, large scale destruction of each other's religious edifices and challenging of each other's tenets had been extensively seen in the south, in the early historic times. The destruction of Hindu temples by Islamic conquerors, in their early victorious pride and zeal should not be confused with the truly methodical and systematic efforts in the organisation of public places of worship under Islam, and the ultimate achievement in it of a kaleidosespic multiplicity of phraseology within the severely self-imposed uniformity of its basic format—which could not but be the product of a very orderly spiritual mind. If every form is that of God-incarnate, as different from God-transcendental who is said to be enshrined within each man, then Islamic architecture not only had its own legitimate place under the sun but also deserves a more understanding study of its form, purport and prodigious enterprises. Art historians, have no need to hold a meretricious brief to only one *milieu* of structural erections for religion, against any or all other, for that would be disowning the very historic legacy of any formal architecture, which constitutes the attempt towards the refinement of the mental dross and towards a sophisticated projection of mundane modelling for supramundane divine universality. Art, to some extent, again, whether formal or non-representational, is imitative, but 'creative' art is as much a work of godliness, as creative religious symbolism. The severe strictures of discipline laid down for activities within a mosque, as different from the licentious life that may be led

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by a muslim votary outside it, is itself the yardstick for the solemnity of the House of God under Islam. Tradition, festivity, mirth, romantic suggestion and extrovert human analogy of the divine effigy in the Hindu temples is but one facet of life-supreme, of which another facet is the austere disciplined eschewal of any glamour or ritual extravagance that was disallowed to prevail within a mosque. The functions could be diverse and disparate, but the objective is identical, namely, to reach dimensionless God through dimensional yardsticks and earthy sentience.

No study of Islamic architecture can, therefore, derive its appropriateness or fulfilment, unless it is directed towards the understanding of the perspectives in formal art that this religion was attempting to refine and evoke; and it is true indeed that linear dimensions, imaginatively incorporated into a structure can raise that structure above the horizon and hold it up a as a spiritual offering to the God-universal-as a tribute, as a dedication, as an act of purification. Considered thus, Islamic architecture produced a unique impact in the realms of formal structural art and divested it of any dimensions, considered by it as unsuitable or unnecessary to such a formulation, and thus wrests a justifiable place along with the Hindu temple among the panorama of non-material creative endeavour achieved through a purely material media.

It is sometimes suggested that the tomb of Allauddin mentioned by Firozshah should really be elsewhere and not at the place where it is now held to be located, namely, in the Qutb mosque enclosure of Lalkot, as part of the *madrasa* of Allauddin Khilji. This contention is said to be based on the *madrasa* of Allauddin showing 'unperfected techniques of construction', as noted there, which cannot be of the time of Allauddin Khilji when considerable strides have been made in the *arcuate* style. We have elsewhere explained how the *madrasa* and the tomb of Allauddin have a commonness of style which is essentially 'renovated' Tughlaq, although the outer walls of the enclosure (built by Allauddin, as in line with his Alai Darwaza) show the *transitional* true arch modes. If, as is also held by these contentionists that this tomb of Allauddin is, indeed, the tomb of Mohammad Bin Sam (the master of Qutbuddin Aibak), it would not explain how Allauddin created a *madrasa* here and built his own gate also close by (Alai Darwaza) and ventured to erect even a *Minar* (now massively unfinished). We know that Siri was not built at the very beginning of Allauddin's reign, as he was spending considerable time in the Qutb enclosure, building his gate, enclosures and expansion of the mosque and the (now incomplete) second *Minar*, not to mention the *madrasa* also. He was also staying in the Red Palace (by which Lalkot area is indicated as the then citadel). If he had wanted to give importance to his fort Siri and had envisaged its construction very early, he would rather have put all his building enterprise in that Siri Fort, whereas Siri fort had itself been elaborated partly only in the time of Mohammad Bin Tughlaq, consequent upon his desire to combine that fort and Qila Rai Pithora into a unified area, through his skirting Jahanpanah fort walls. Allauddin seemingly wanted Lalkot to be an important and prestigeous locality, due the origination and motivation here of both the Islamic yoke on India politically and initiation of the grand programme of Islamic religious architectural enterprises also,

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of which the Qutb mosque screen and the *Minar* of Qutbuddin have been outstanding visual landmarks already. It would be thus befitting that Allauddin had his expansion, in gate, *madrasa* and *minar* (incomplete), here, in an inspired response. It would be seen that the only other place where he had associated himself with another notable building was at Nizamuddin Aulia complex, where he built the Jamaat-Khana mosque (pl. XXVI A and B) for the saint's discourses, before which the saint is said to have customarily used a place in Kilughari (Kilokhri), now unfortunately extinct. Thus, it would be a highly debatable point if the focus of attention of Allauddin's tomb should be shifted to another purely temporal defensive fortification location like Siri, as is suggested also by this theory. It is also obvious that whatever is substantially standing, at present of Siri fortification, had itself been essentially the elaboration of Mohammad Tughlaq—especially the core tunnel passage in the fortification wall for unobserved movement and watch—which was at regular intervals, and was linked by an upper attic ceiling opening and exit on to the rampart walk on the inner side, for mounting on to which flights of steps are also seen here and there from the inner city (pl. XVII A-C). This ceiling passage for exit has been carefully organised in an elongate octagonal beam course over which a raised covering supports the pointed gable roof in an upper shell space through which one exits into the rampart wall by a door opening. Whatever was built at Siri for fortification in Allauddin's time was the massive mud-and stone block base walls and simple gates, of which the only two extant, one at the western middle near Shahpur Jat Village and another at the eastern end, near Khirki Masjid (and by contemporary accounts leading by a road directly to Kilokhri) were extensively rebuilt into the present form only in Tughlaq times. We have mentioned elsewhere about the remains of Hazar Situn and a lower level domed *maqbara* near by, the latter of which is of a piece with Jamaat Khana mosque in style and was probably of Allauddin's time. If it is further argued, as done, that the tomb of Allauddin, had it been built on the style of Alai Darwaza would not have fallen, but held on till today, it may be mentioned that several tombs, even after the arcuate principles have been well elaborated, had also fallen down in Delhi (and in other towns of India) and Alai Gate was clearly a special erection ceremonially for the Sultan to move into his expanded Qutb mosque outer wall he had caused to be built (much of which had also now fallen) and cannot be compared to the relatively more modest last resting place for himself. Further, even in Hauz Khas, Firoz who built several structures including a *madrasa* and a mosque, decided to place his own mausoleum also there for the sheer association of the place, and it is to a similar complex of early structures of Allauddin in the Qutb mosque area that Allauddin's own tomb belongs. There is no doubt that the *true arch* had come into being in Allauddin times, and perhaps not *before him*, but the coffer-type (what is called 'lantern type') of Hindu ceiling which is ubiquitously seen continuing in several places, including Qutb area, well beyond Khilji, Tughlaq and Sayyid-Lodhi times, even into the Mughal, continued because of the most satisfactory character of this type of ceiling in certain contexts and this device is not *transitional* to any arcuate concept. It is an out and out indigenous device in thousands of temples in India. It is the *squinch* and pendentative

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evolution which is the true indicator and parameter of the *arcuate* development, and it is in this manner they are seen in Alai *madrasa*—leading them from Allauddin times to those of Tughlaq and revealing other stages of earlier formulation only in the *maqsura* screens of *three* stages here in the Qutb mosque—those of Qutbuddin, of Iltutmish and of Allauddin respectively; and we have no means of ascribing any phase here to Balban either. Firuz Shah's statements that he repaired the tomb of Allauddin and the wall of the Abdarkhana (robing room) and the west wall of the mosque which is within the college, are totally true and found visibly proven at the site, even today. Only the tesselated pavement (*farsh-i-tarshib*) he talks of is missing and this was perhaps in tiled mosiac of the design popular in the times in geometric patterns. Be this as it may, while one cannot gainsay that Mohammad Bin Sam's tomb has a greater chance, if locatable, of being located at or near the oldest among the Delhis, namely, Qila Rai Pithora, it cannot be said, at least on Abul Fazl's evidence, to refer only to Allauddin's *madrasa* site. For Fazl mentions only that the tomb of this Bin Sam, along with some other Sultans are all located in Delhi, and Delhi by the time of Abul Fazl had meant a great deal larger area than merely the Qila Rai Pithora town. There is nothing in the Qutb mosque area in the cloister techniques there, that could be related to the Alai Madrasa, because the latter is in its own way well beyond the stage of the Qutb mosque cloisters. It is even much more advanced than the arch arrangement of the Qutb mosque screen which, as we have shown elsewhere, have three clear stages, not only with reference to the top part of the arch, but also in relation to the jamb composition and motifs and Allauddin's is the last of these stages; and the Alai Madrasa evidence, in a cumulative sense, begins from this stage and gets a sudden spurt by the Seljuk impulse, seemingly part of an importation. Amir Khusrau who was a contemporary of Allauddin, was himself a Persian poet who came to India and similarly, the Seljuk connection for Alai Darwaza was a fortuitous intrusion and certainly was carried over further into the early Tughlaq times for a special erection like Ghiayasuddin's tomb. There is no tradition besides, even vaguely associating a particular location in old Delhi with Bin Sam, to merit a controversy on it. The developments from trabeate astylar corbel arching to the emergence of the true arch have been so well preserved, in parts, in the premises that its stages have not to be linked with the Alai Darwaza composition, which is a perfected and *made-to-order* special erection, of an acknowledged alien architect, expert in Islamic modes of the Seljuk school. Since Allauddins's tomb, as shown earlier above, has no chance to be at Siri, when he was mostly residing in the Red palace at Lalkot—the citadel of Qila Rai Pithora—Siri Fort was only to provide for the expanding population, of Qila Rai Pithora and its environs (including the very Siri village area) and Allauddin considered it expedient to provide a fortified security to the expanding city and more significantly he wanted to come down from rocky Mehrauli to the a plains around Siri and Hauz Khas from the point of view of logistics. It could be that because of the presence of the great Jami mosque at Qutb enclosure and the Rauza of saint Qutbuddin Bahktyar Kaki and other early associates, Allauddin was surely inclined to organise both his *madrasa* and tomb in that area, in much the same way as Iltutmish himself fixed his mausoleum in that area. Balban

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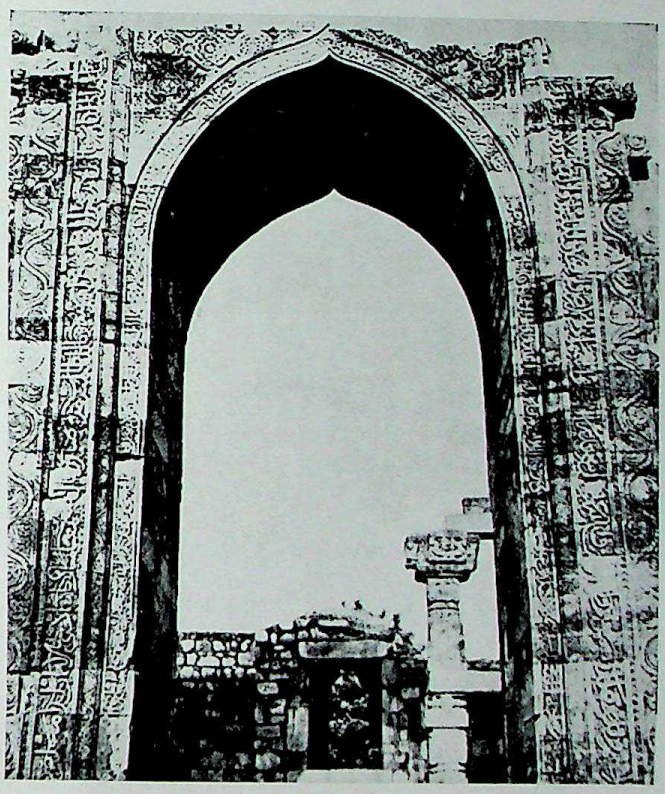
19a-c. Qutb mosque screen, stages of Qutbuddin, Iltutmish and Allauddin.



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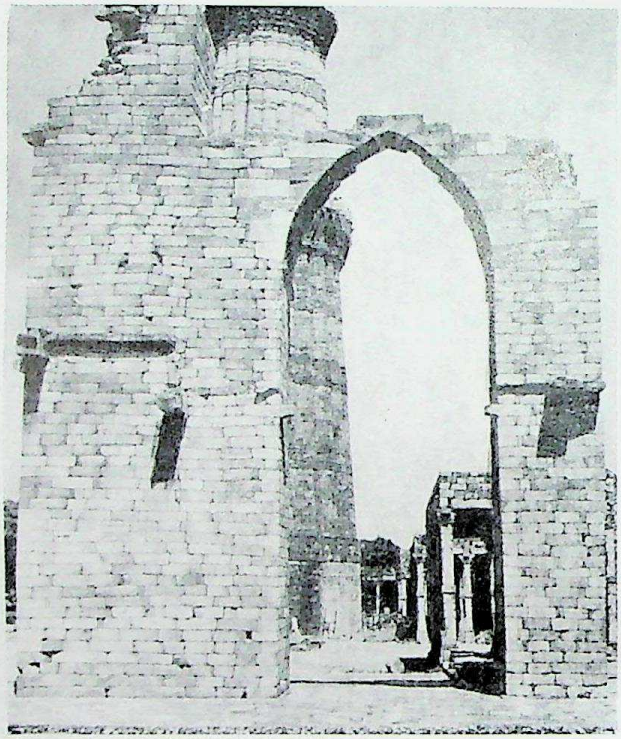
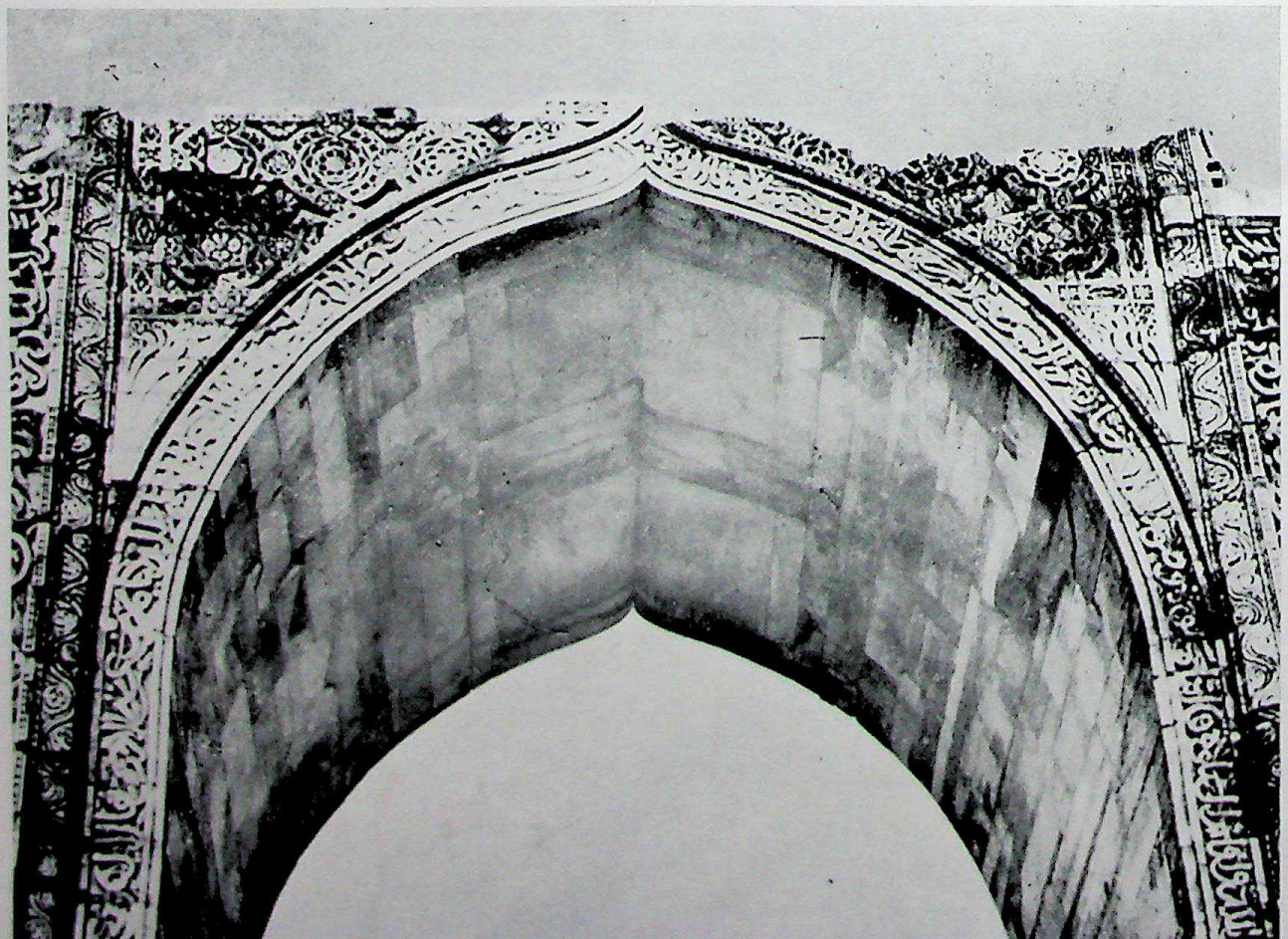
20. Qutb mosque screen arch, crest details, first stage.





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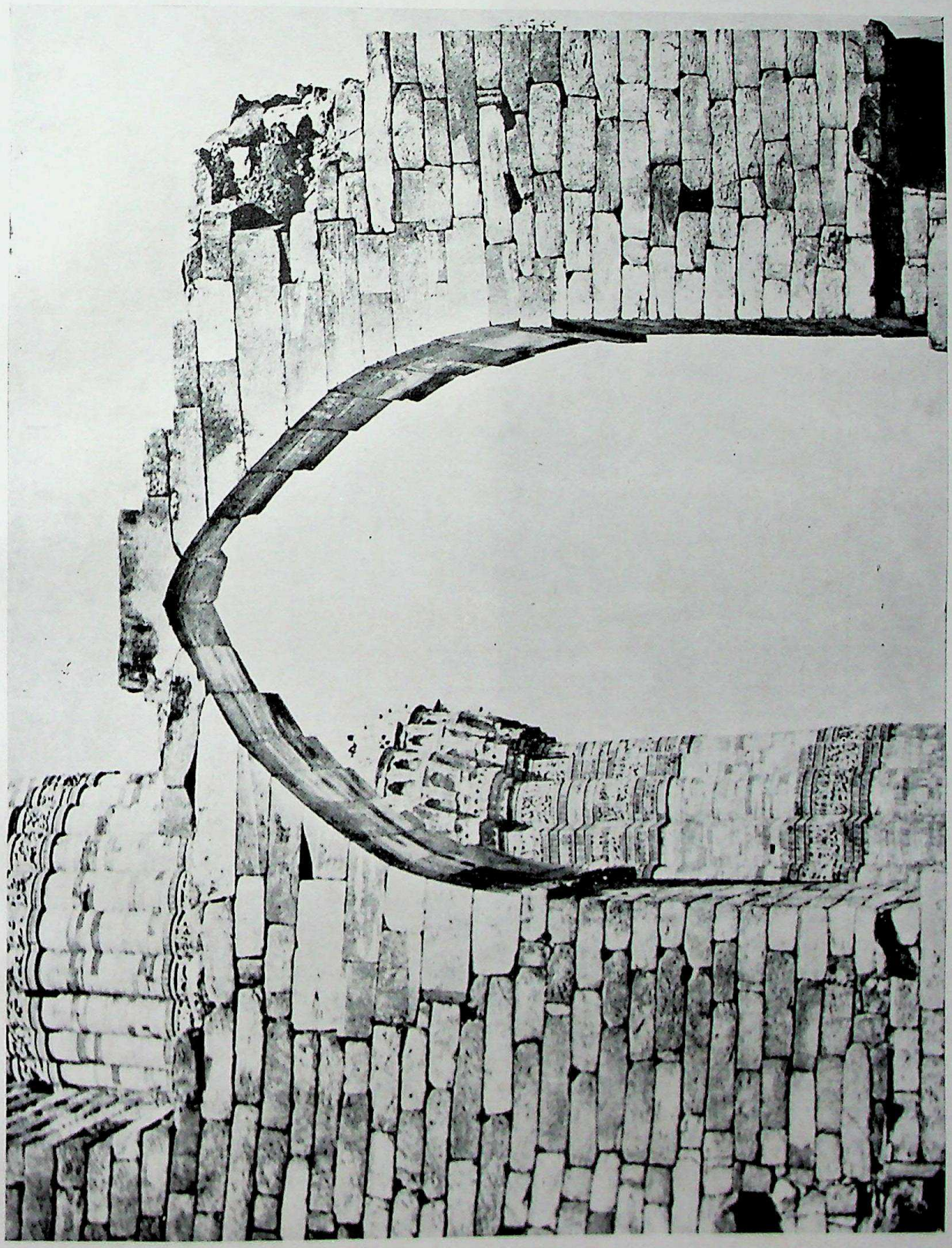

21. Qutb mosque screen, arch, crest details, Allauddin stage.

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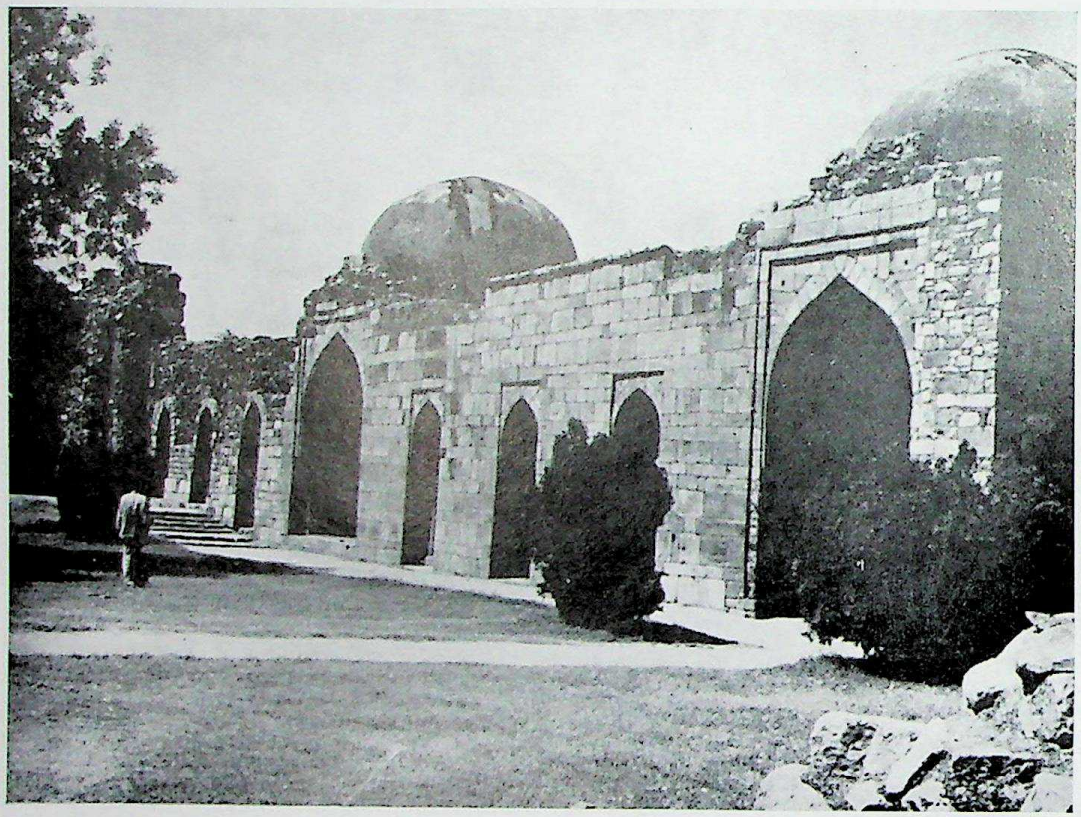
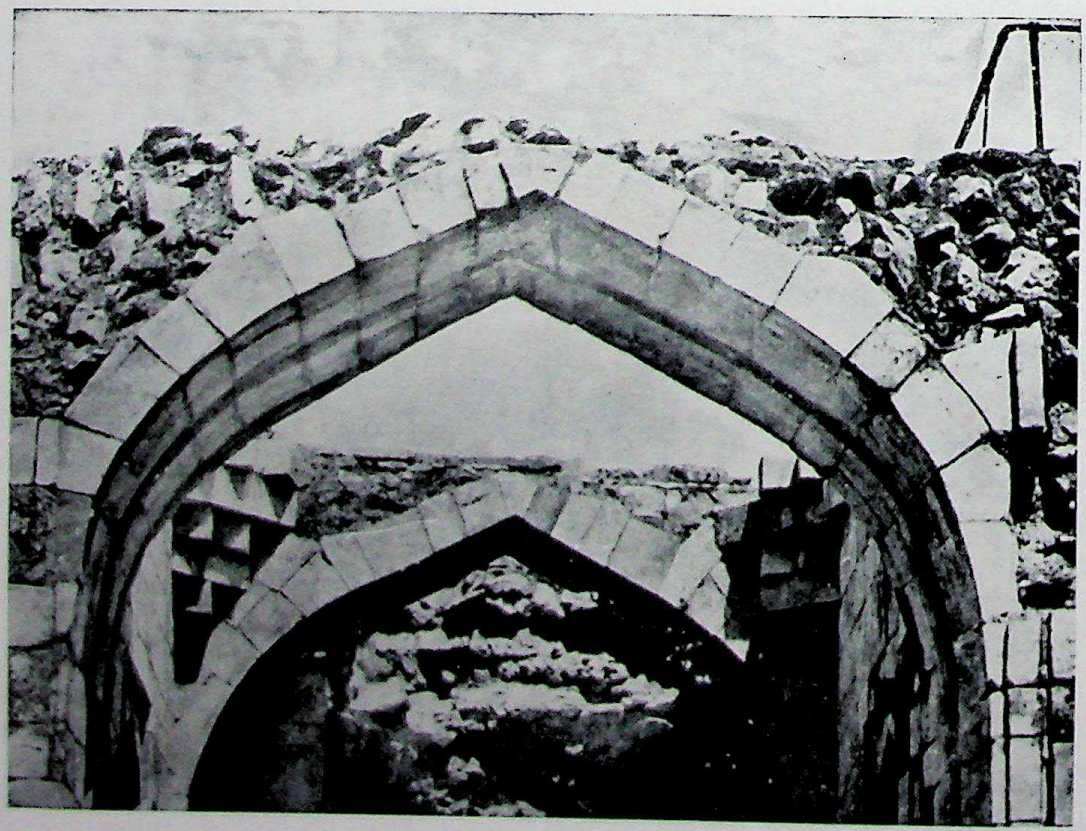
22. Alai Madrasa, Mehrauli.

23. Allaudin's tomb, arch and squinch detail.





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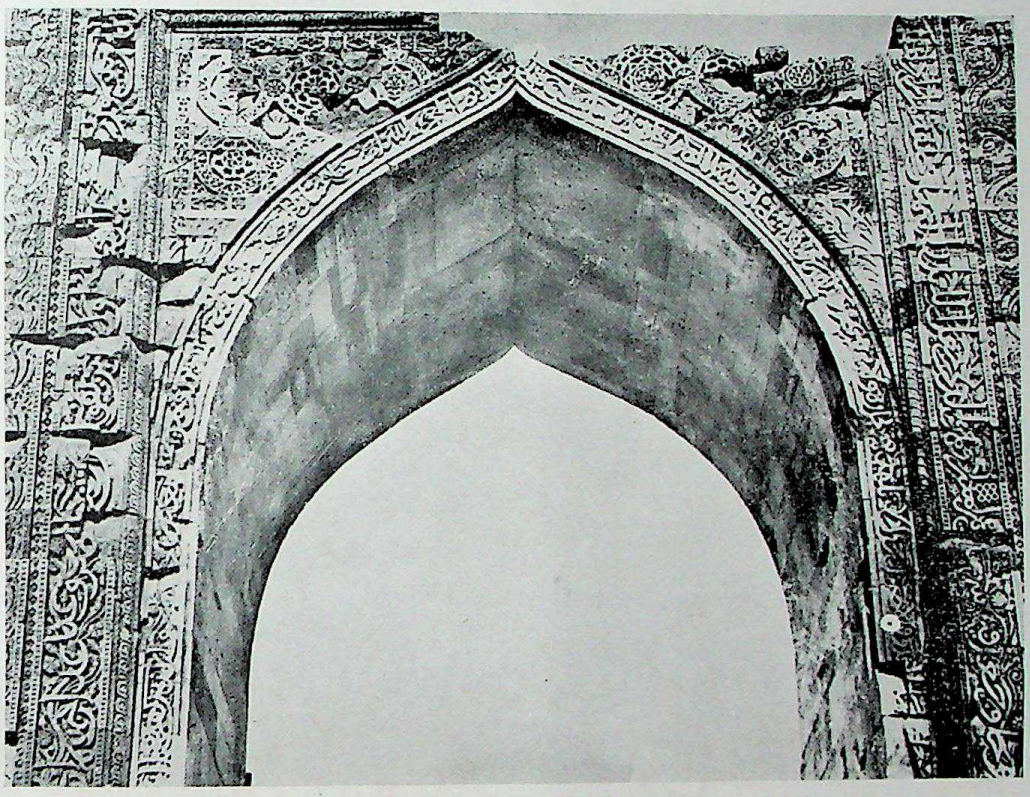
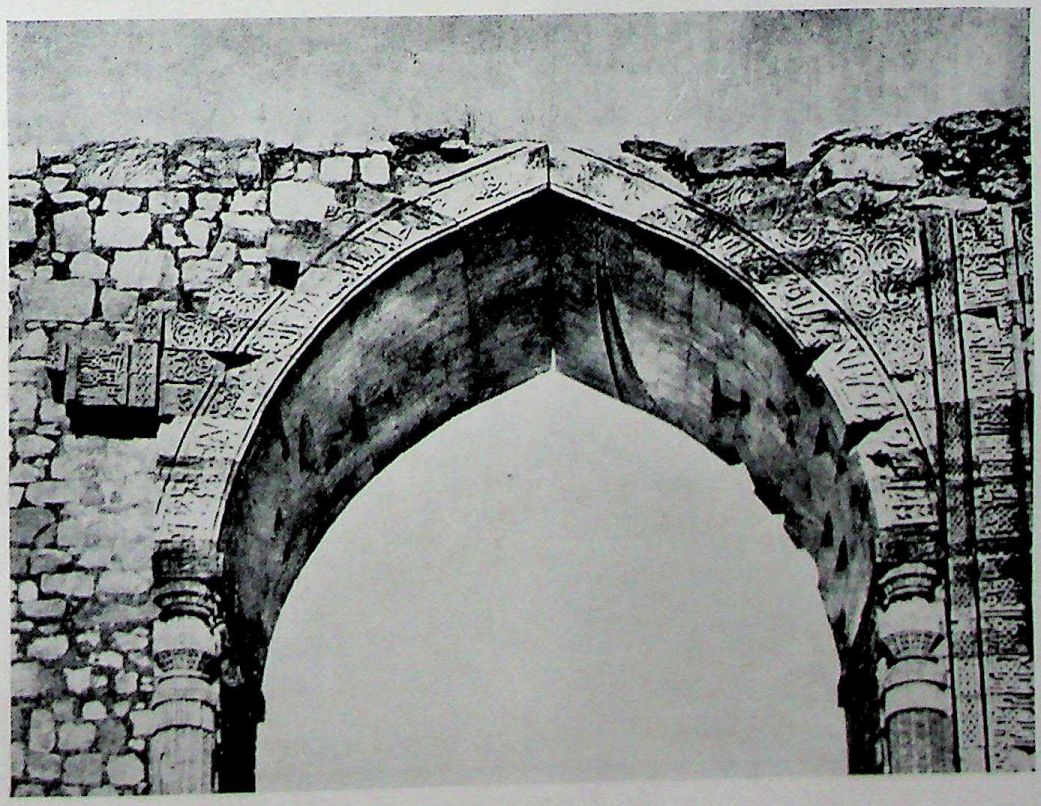
24a–c. Arch developments in three stages in Qutb mosque complex.





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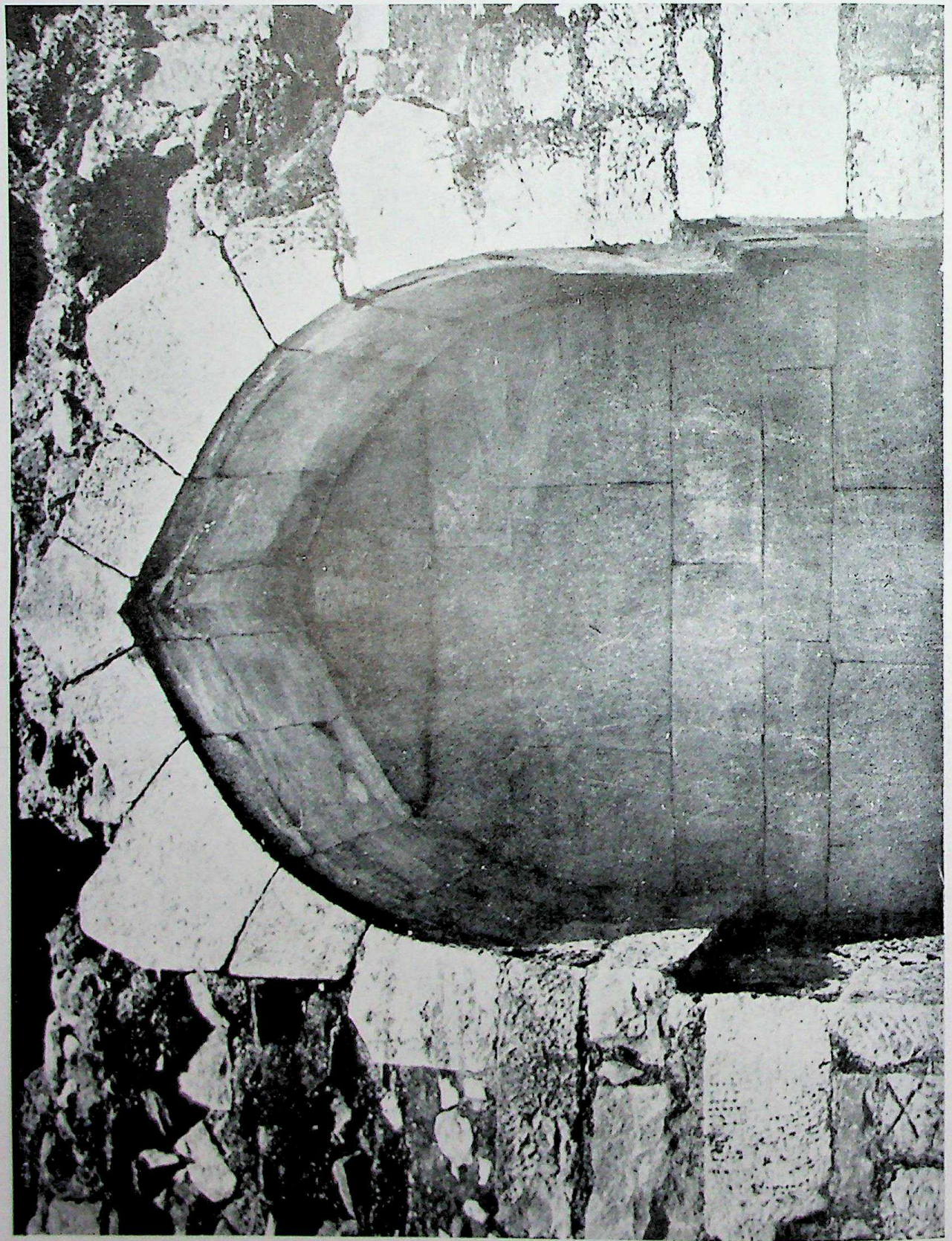

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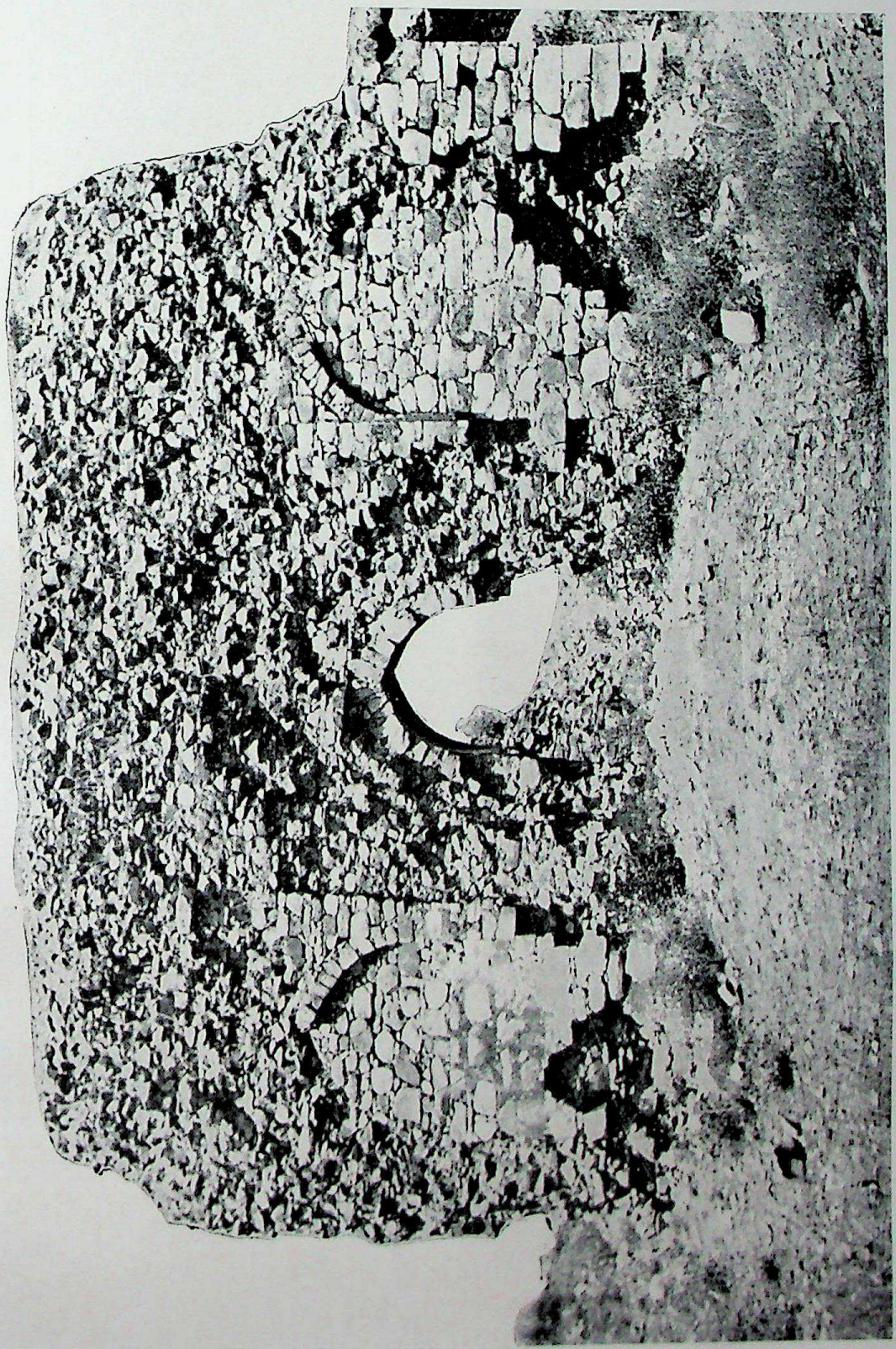

25a. Balban's tomb in *Dar-ul-Aman*.

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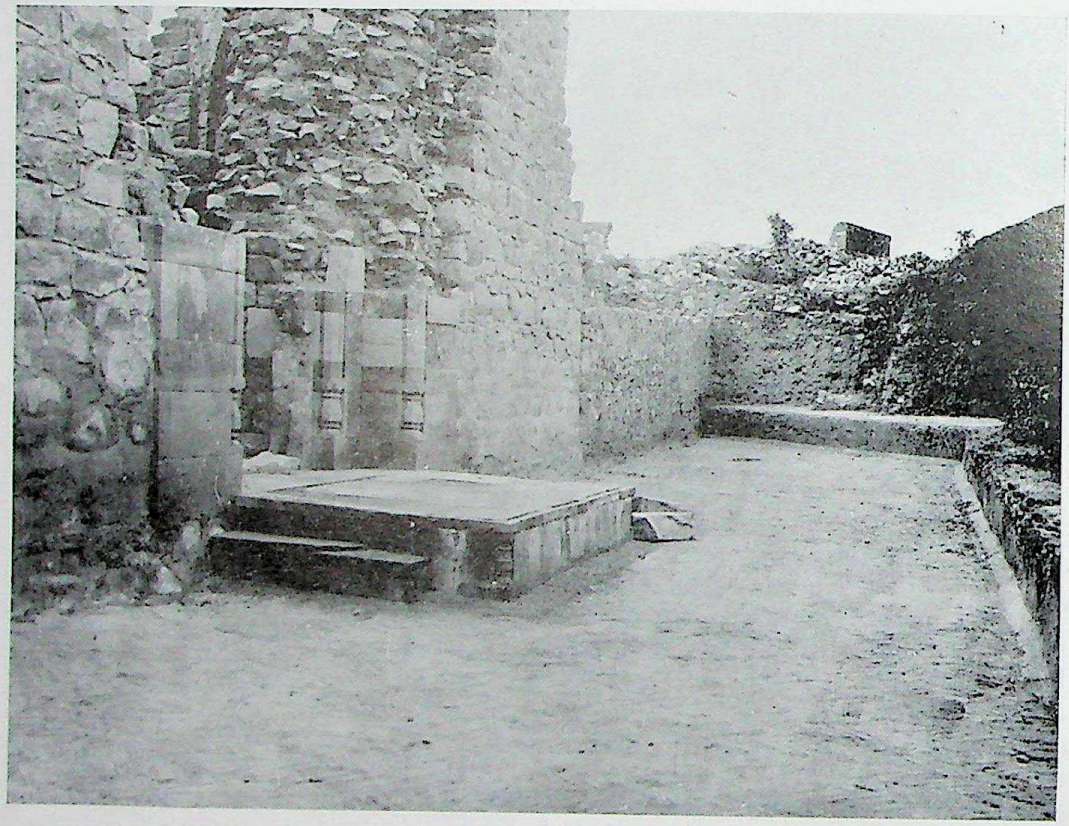
25b. Balban's tomb exterior entrance landing.

25c. Balban's tomb, entrance pavilion.



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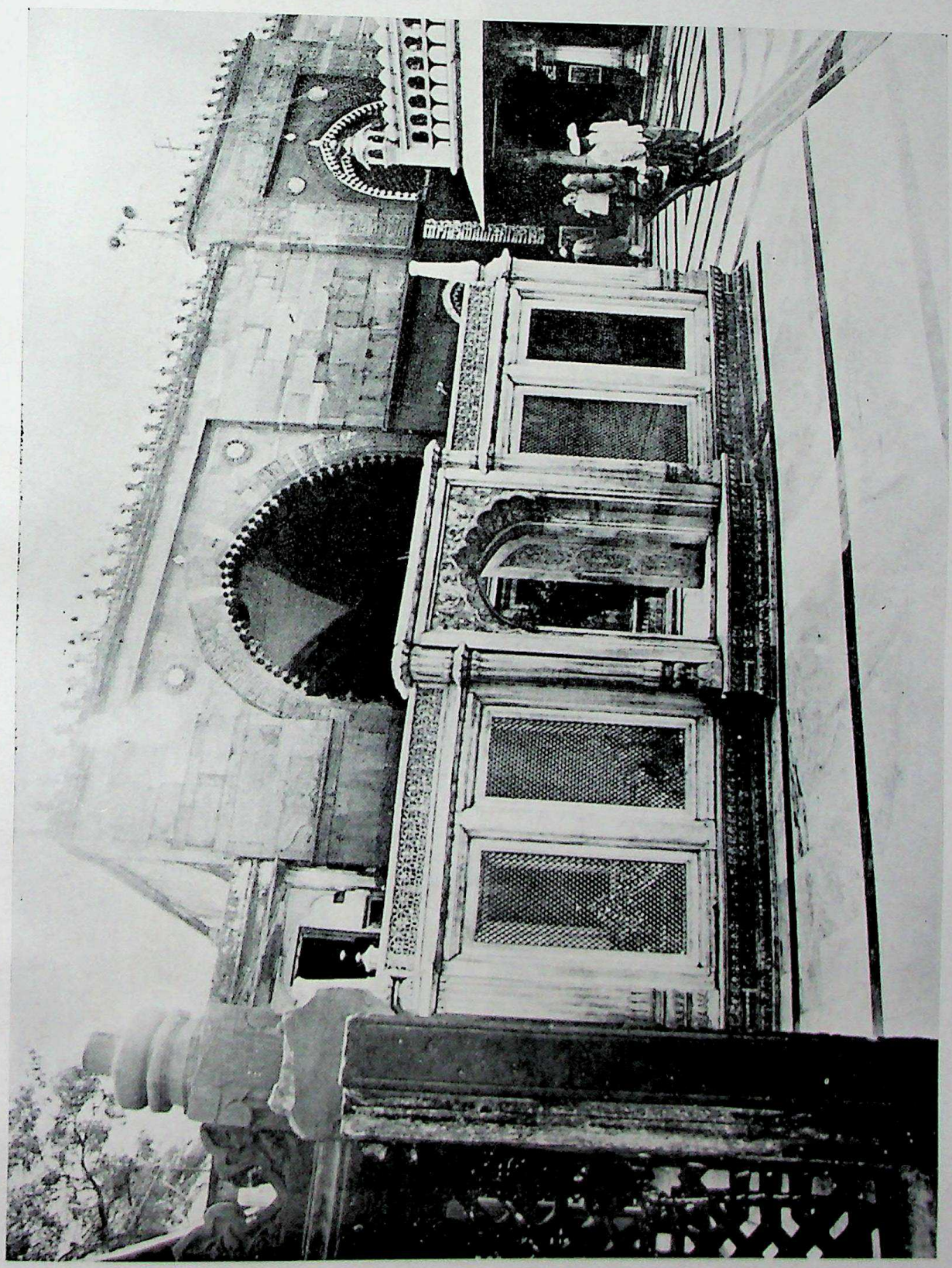

26a. Jamaat-Khana mosque, Nizamuddin courtyard.

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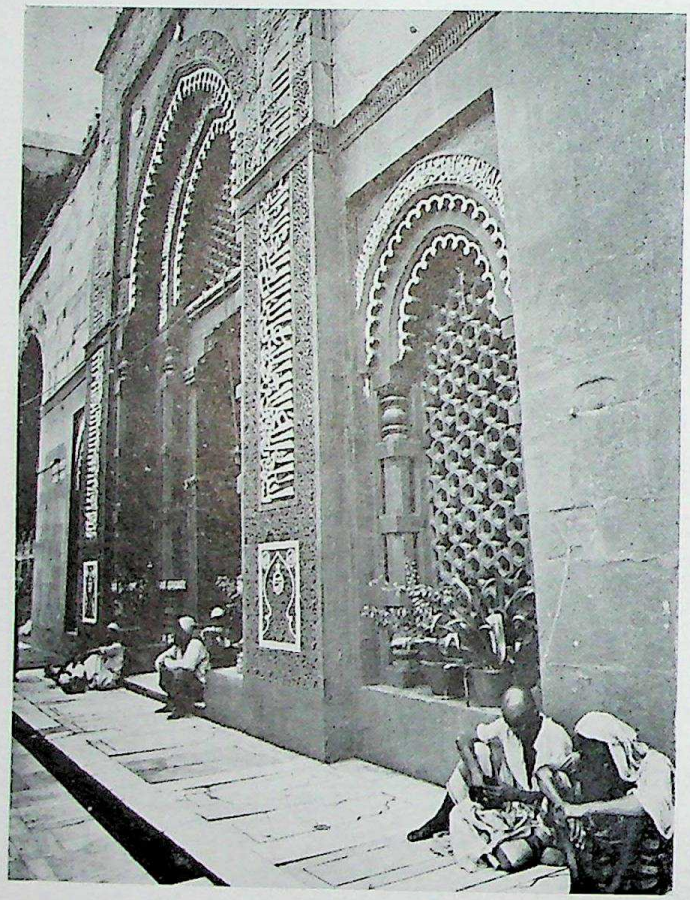
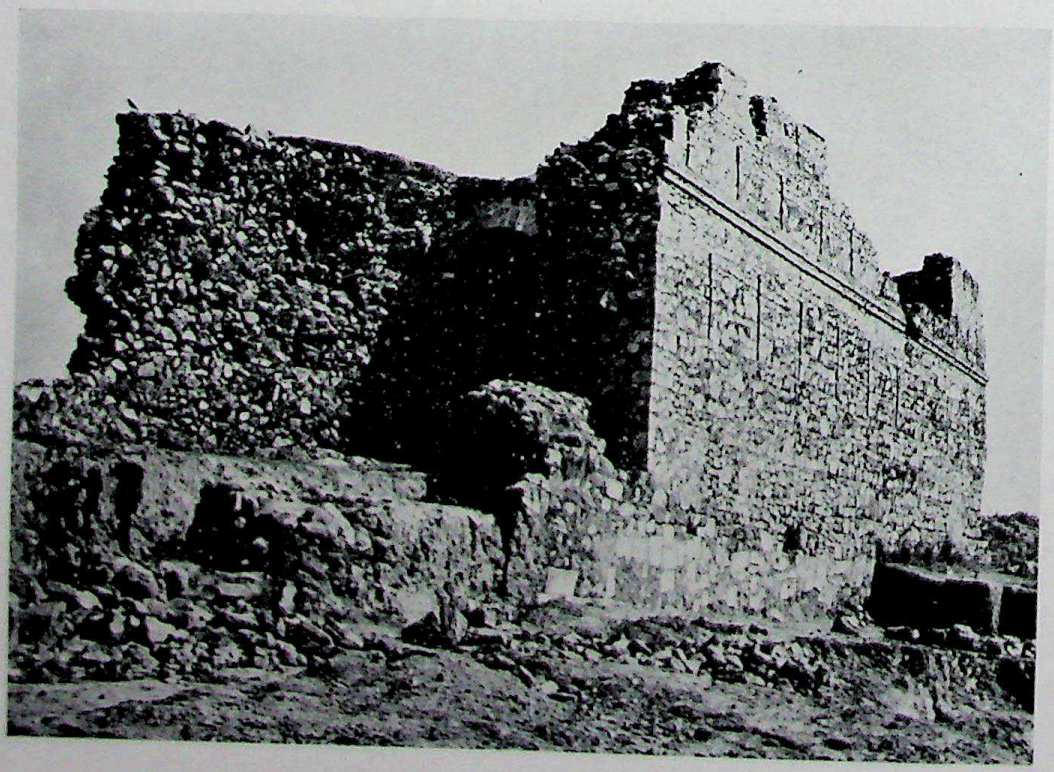
26b. Interior view of Jamaat-Khana mosque, Nizamuddin.

27a. Siri fortifications, tunnel passage.





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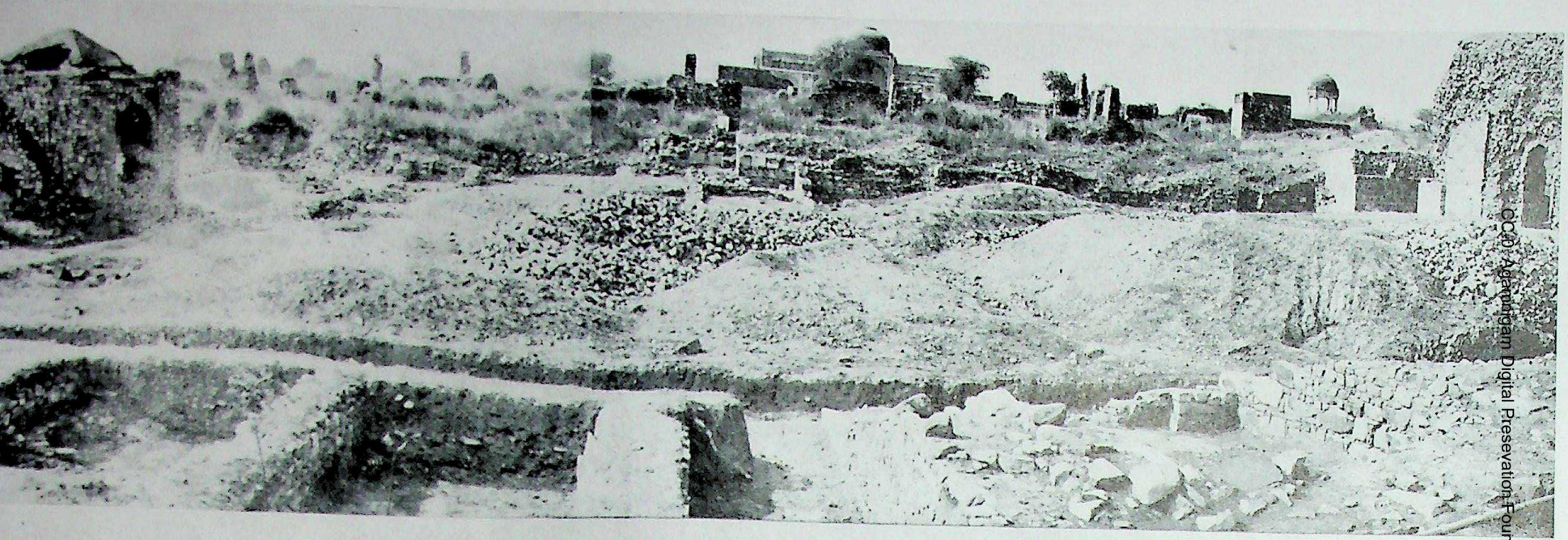
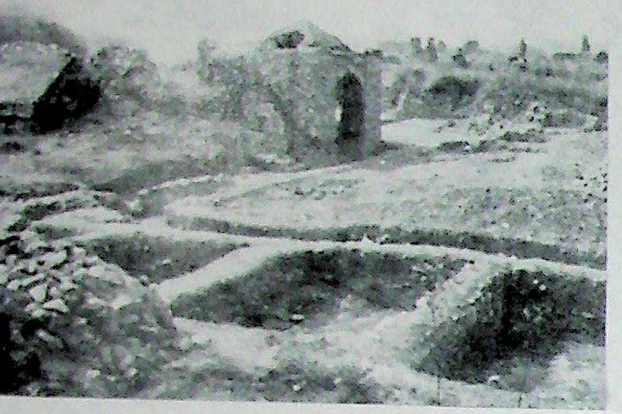
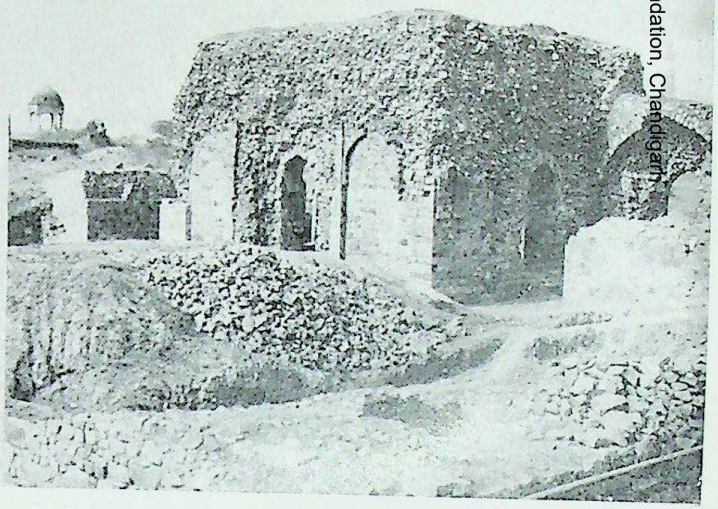
27b. Detail of tunnel passage, Siri.

27c. Attic passage above octagonal beam stones, Siri fort.

28. Panoremic view of Der-ul-Aman.







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too evidently located his own last abode at *Dar-ul-Aman*, just outside Lalkot, even before his end could be foreseen, on the possible ground that he also, in his own days, had been given to bouts of cruelty and ruled with an iron hand, and gave unto himself the asylum that he had so ingeniously and imaginatively created at *Dar-ul-Aman*. Further, Balban, as he did not belong to the Slave dynasty, could not have had any special yearnings for the Qutb mosque area or Lalkot, but rather to a place of his own choice, leading to his *Dar-ul-Aman* (Pl. XXVIII) outside Lalkot, but Allauddin's associations with the Qutb enclosure were more sentimentally close.

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Four

Neighbourhood Centres

Chaunsat Khamba at Kaman

Similar to the perhaps relatively later Ukha Masjid at Bayana, Kaman Masjid (also converted out of a pre-existing Hindu temple) has its south side axial aisle shorter in relation to the north side one. It also had provided for a *zenana* chamber on the northen end of the sanctuary, with a staircase entrance from outside for ladies to approach this part. While at Kaman, only this stairway and landing outside is now preserved, at Bayana, only the inner *jali*-screened *zenana* chamber is preserved and the outer stairway has disappeared. Fifty-two carved pillars have been built into the walls and roof of the *masjid*, while ninety-six more are freestanding in the organisation of the converted mosque, many of which are stilted and taller than others. The layout of both Kaman and Bayana Masjid are strikingly similar, except for the fact an Arabic record mentions in the former, 'Din-us-Sultan ul Alam, ul adil, ul azam, ul mulk-Muzaffar Iltutmish us Sultan', the name part of king having been badly injured in the record. There are, besides, no arches at all at Kaman, while Ukha Masjid have them. The *mihrabs* again are done in overlapping courses at Kaman, as typical of the Iltutmish stage at Delhi also, unlike the Bayana example which shows true arch principle. A record in Persian, on one of the pillars close by mentions 754 A.H., which is the third year (1353) of Firoz Shah Tughlaq. The Bayana Masjid must have been converted a little later than the Kaman example, possibly in the later Khilji—early Tughlaq stages, since the area of Bayana was put in charge of Bahauddin Toghrill who built Sultan Kot—the then name of Bayana (the original name, however, being Santipur-Pathayampuri) and during the times of Balban, Allauddin Khilji and Tughlaq Shah (Ghiayasuddin) and his son Mohammad Tughlaq, all in the same first few decades of the 13th century A.D. and the last two decades of the 12th, it was under firm Delhi Sultanate rule.

Early Badaun monuments

Badaun is most notable centre of Islamic culture and history from the earliest stages consequent on its having been the fief of Iltutmish as a prince. The great Nizamuddin Aulia was a Badauni and was born here.

By far the most significant among the rich Islamic architectural remains at Badaun are the Idgah (fig. 32 and Pl. XXIX) outside the town, in a grove and the Jami Masjid-Shamsi (fig. 33a and Pl. XXX A-F) in the heart of the old town in Maulvi Tola. Historically speaking, there cannot be any two opinion that these were among some of the earliest Islamic structures erected in Upper India, comparable with the similar ones in Delhi, Ajmer and Bayana. Of the time of Sultan

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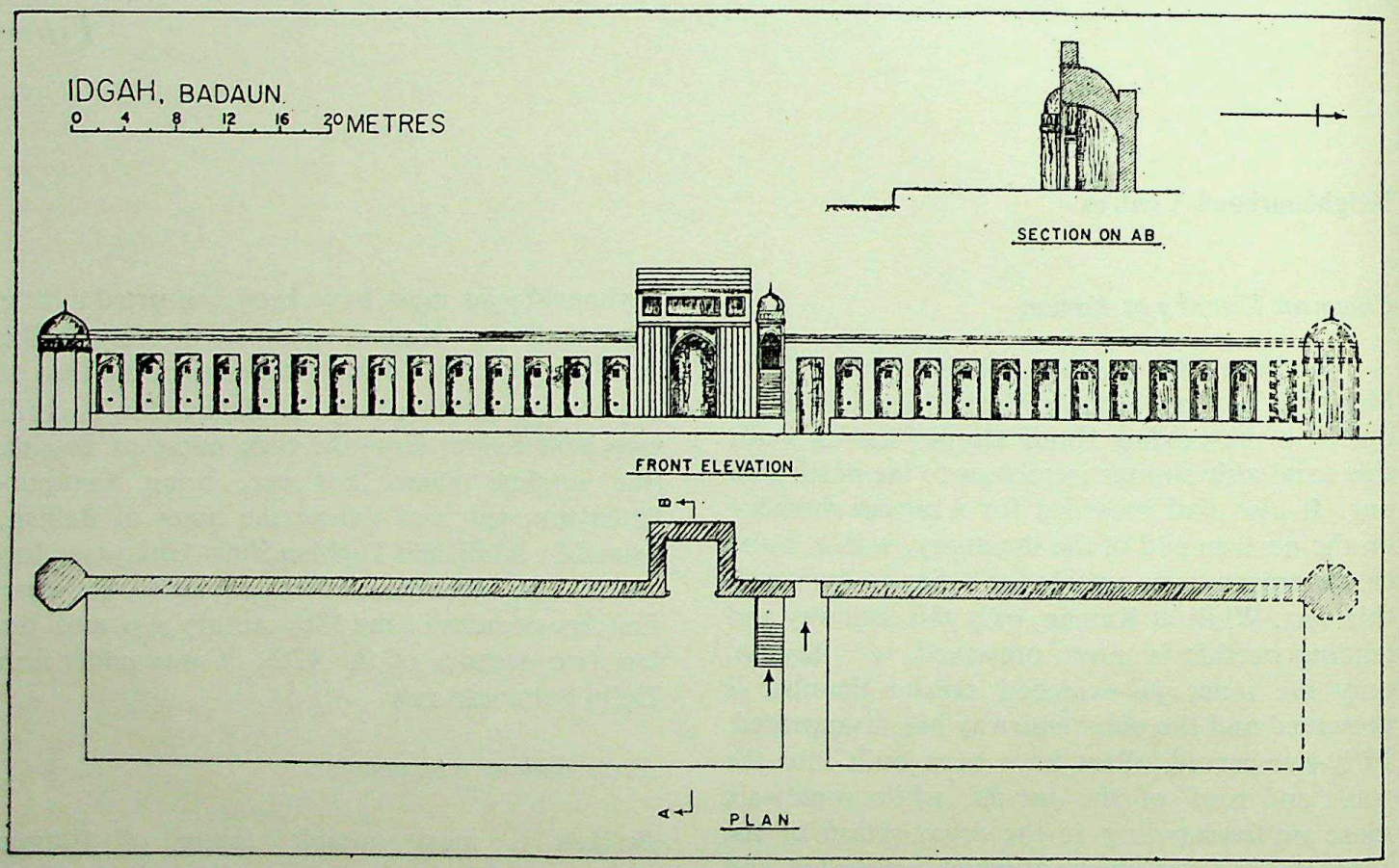
32. *Idgah (old) at Badaun.*



Shamsuddin Iltutmish, the former is a fairly large complex, now also including the Rauza of Badruddin Shah Vilayat Khan behind the Idgah and other sundry additions. Together with the Jami Masjid, they retain certain special features. The Idgah has octagonal domed end-buttress with access provided through its interior to the top of the wall mosque. The central *mihrab* recess has *jali*-design blind windows on upper spandrel area and a small square block of *jali* window at the lower centre of jambs. There are engaged pilaster components on the jambs with a 'pot-and-shaft' scheme and with recess in the jamb band decorated in cut plaster work both of floral and vegetal design and perhaps of Qoran verses now overwhelmingly white washed. There is a high-staired *mimber* provided by the side of the central *mihrab* in the Tughlaq style, as at Cambay (Jami Masjid) in Gujarat. This was seemingly a subsequent addition. There is cross access to the rear through

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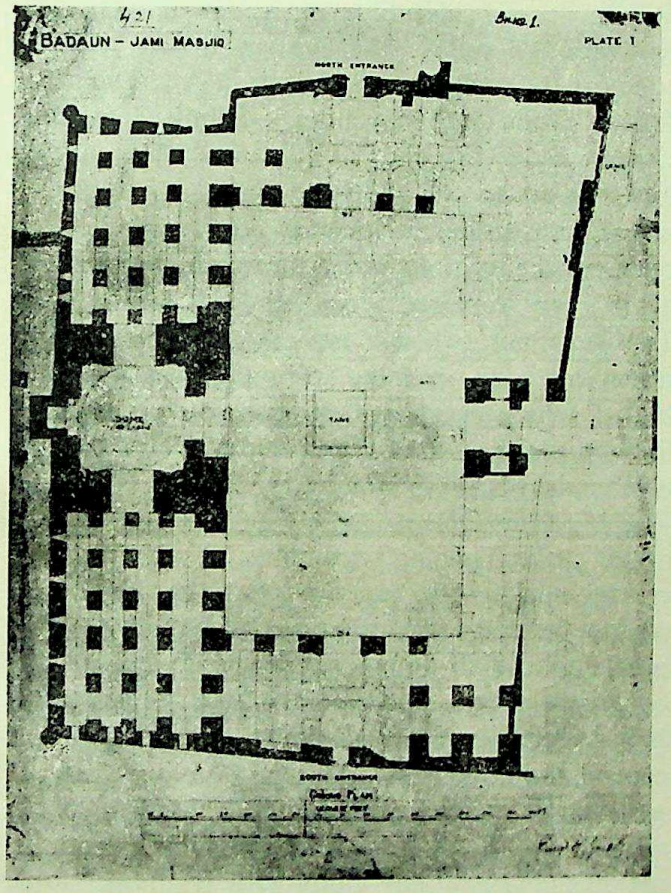
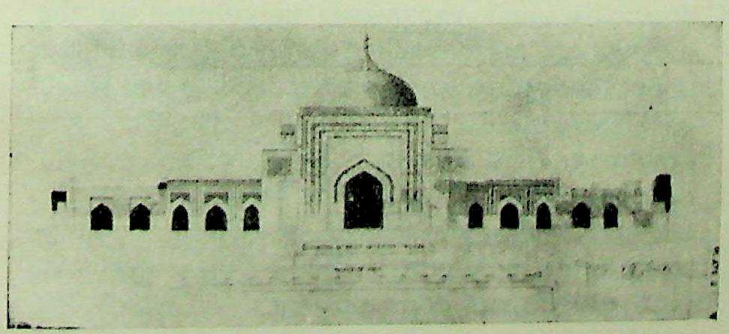
33a. *Jami Masjid, Badaun, plan.*
33b. *Jami Masjid, Badaun elevation.*





an arched opening, interrupting the wall mosque just to the proper left of the main *mihrab*. This is a unique feature found only in very early *Idgahs* in India and not found in any Indian mosque, except in two instances in Bengal, Adina mosque at Pandua (1375 A.D.) and Sath Gumbad at Bagherhat (1450), though in West Asia these appear to be a regular feature in mosques as well as *Idgahs*. The old Idgah behind Qila Rai Pithora to its south-west, on the rocky highground (which Timur may have, according to one view, used for this court after his invasion and conquest of Delhi) contains such a provision.[1] There is a provision for squinch of wedged blocks and half-dome recess in the *mihrabs*. There is a rear side pavilion structure (giving access to the *Rauza*) which has double pendentative and wedged rows of squinches at corners, which occur in Delhi first during Allauddin's times. Thus, there is sufficient evidence in the Idgah structure to show that the structure could have been erected during Iltutmish's time but received repairs and improvents during Khilji time and on a significant scale during the Tughlaq period when perhaps the *mimber* and corner buttresses were added. The outline of the arches of this brick and plaster Idgah, where the main bands of facings of the arches are heavily encrusted with the plaster layers and may even contain a regular sandstone workmanship within them vestigeally, is prevailingly of the Khilji-Tughlaq transition shape, with the springing of the arch supported by projection of plaster work and with no ogival crest part for the arch as the Iltutmish stage, but curving in four-pointed

1. E. K. Atkinson, *Statistical, Descriptive and Historical Account of the N.W. Provinces of India*, 1879.

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form extensively seen in Delhi. The arches and *mihrabs* of the Idgah are even taller than those of the old Delhi Idgah in Mehrauli and the front level which must have been slightly lower in the original condition have been raised on the southern half, while the northern half is at the ground level giving the pristine configuration of the frontage of this Idgah, said to have been built in 1230 by Ruknuddin, son of Iltutimish (1228-36), according to be incription (dated A.H. 628) on the outer gate.

The Jami Masjid (fig. 33b), again, has several interesting features. It is obvious that its single dome on top of the innermost bay cubicle of the sanctuary, in front of the main *mihrab* has not been the creation of the Iltutmish's time, but rather of the time of the late Khilji stage whose low spheroidal domed character it copies in its roof dome, although the octagonal drum and *kanguras* on them close to the dome should have been embellishments of the Sayyid times, whose Sultan Allauddin Khan Alam had close association with Badaun. His own mother Makhdum-e-Jehan is buried in a unique tomb structure in this town (1472—Pl. XXXI). The facade or *Ivan* of the sanctuary has the typical screen wall, with miniature turrets on the top corners of the central higher wing of screen, as seen at Bayana, in the gateway screen of Ukha Masjid. The jamb pilasters have a broad similarity to those of the Idgah in the town, dealt with above, and reproduce calligraphic and ornamental designs in recessed parts in cut-plaster masonry, perhaps even here also hiding the sandstone workmanship within, along with 'pot-and-shaft' inner jamb pilaster edges much stylized in plaster now, both here and in the main *mihrab*. The latter also had, despite it considerably modified pattern (in renovations) today, the typical ornate dagger edge for the arch outline as seen in Alai Darwaza first in Delhi and becoming a Seljuk introduction in India for the Khilji times. This motif however, in several modified forms continues in several subsequent periods upto the Mughals. The arch of the main *mihrab*, however, appears to have been repaired considerably during the Tughlaq times, when a typical quadrantal slopy in-curving edge, over the springing, was assumed by it, which has been stylized into its present form in plaster work as seen today. This feature is seen elsewhere, in stone work, in Mohammad Tughlaq's monument at Bijaymandal and certain other early Tughlaq structures in Delhi. The central part of the sanctuary, besides the domed ceiling, carried over corner wedged squinches and pendentive half-dome supports above in the octagonal facets, had also its two side or lateral bays carried out in half-domes fused with the central dome ceiling. . This is a unique feature, not seen anywhere in Delhi. But certainly more akin to the Jaunpur style in its formulation. It makes the central bay along with its flanks look distinctive, and expansive, in contrast to the transversely barrel-vaulted bays – also a Jaunpur idiom – following further to the north and south of this essentially three-bay axial spread of the sanctuary. The *mimber* is however, not present near the main *mihrab* of the sanctuary. At the northern and southern ends just within the sanctuary limit, and along the line of the outer-most bay, are found door openings, of which the northern one is a typical Tughlaq composition of pillar lintel and arched tympanum with the jambs even having a mild batter. It is seemingly intended for *zenana* entrance from the northern side

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alley outside the mosque. The southern door has, however, some alteration to its pillar lintel composition and appears to be of the time of Akbar with their bud-shaped pendent for the lowest course of the corbel overlaps. The sides of the mosque have been provided with a two-bay cloister which have domes of the characteristic ribbed domed and corner pendentive and single-wedge squinches and seem also to be post-Tughlaq additions. The spacious courtyard has a very imposing entrance hall and dome, very much like that seen in Begampuri Masjid, Khirki Masjid etc., in Delhi, but on more magnificent and or developed proportions. There is a staired passage let into the thickness of the walls on the southern side near the door entrance, with narrow horizontally barrel-vaulted ceilings, which are so characteristic of Firoz Shah Tughlaq's times, as seen in Hauz Khas and in Jami Masjid in Kotla Firoz Shah at Delhi. It is obvious that the original pattern of the Jami Masjid which should most propably have had no dome, but only the imposing arch screen in front had been considerably added to in late Tuglaq to Sayyid times with the cloisters and the single dome itself, having been a post-Sultanate introduction, as seen in Malwa also, around the time of the 14th-15th century A.D. as in Kamali Masjid, and Bhoj Shala, etc. The arch decorations everywhere by their four cornered pattern and the support by inset jambs and mild in-curving tendency appear to be of the Tughlaq to Sayyid stages. The lower part of the mosque walls are built of stone, while the ceiling, etc., are rendered in brick and stucco. The screen wall of the Jami Masjid with ornamental work perhaps done in sandstone—now unfortunately hidden—appears to have been rendered also essentially in brick and plaster ornament. The size, chaste proportions, the screen wall with its large square oriel windows (blind) on either side of the central raised screen, the Qoranic and floral motifs on the jambs, the single-domed ceiling and terrace of the sanctuary and the severely austere outlines of the arches, pendentatives and drums appear to fall in line with early mosque pattern in in India (though extensively renovated here) carving out a special niche for Badaun in the process.

Bayana

The Islamic monuments at Bayana cover both the pre-Mughal and Mughal times and form a fine group wherein one can see the impact of Imperial Delhi, right through. Further, the fact that the strategic political and topographical location of Bayana, girt by hills on one side and a river on the other and its being the starting point after Delhi for further advances into Ranthambore and rest of Rajasthan along the western flanks of Madhya Pradesh, make the place quite important. Sultanate, Khilji, Tughlaq, Lodhi, Sur and Mughal involvements in organising the construction of the place had made it a kaleidoscopic art centre. At the earliest stage of the Sultanate, seemingly in Qutbuddin's and Iltutmish's times, in the wake of the Ghaznavid and Ghorid invasions earlier into this place, a situation not unlike that of Kaman, or the Arhaidin-ka-Jhonpra of Ajmer or the Bhoj Shala of Dhar, had been created, by the sack and transformation of the locally celebrated Ukha (Usha) Mandir (Pl. XXXII) into mosque (subsequently re-converted partly into the temple again, as current now) where already from the second half of the 9th century A.D., there had been a flourishing temple seemingly of

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the Bhagavata cult of the *Panchavira* dimensions like that of Vidisha (Madhya Pradesh) or Nagari (near Chitorgarh, Rajasthan), if we are to make any deduction out of the rectangular layout of the main shrine and of the circumambulatory character of the sanctum from outside that had not been disturbed by the subsequent Islamic conversion in any way. There is sufficient evidence to show that like the Bhoj Shala and Arhai-Din-Ka-Jhonpra, the main temple was built on tall stilted columns, with characteristic 10th-11th century pillars, corbel, *vandanamala* (flying arches) of exquisite workmanship and with provision for three shrines in a row (whether they were originally together or otherwise, we dont know). The *garuda* banner post (Pl. XXXIII) of a modernised variant stands on the courtyard at a lower level, overlooked by the shrine which is located at the upper level approached by flights of steps from the sides, which though appearing a later renovated layout, may still be following an original pattern. But all the pillars of the upper level of the temple go down to the ground level, through being hidden by the basement chamber, not accessible today to the view. Around it and along the back wall, the mosque features had been duly created, such as *mihrabs* and perforated windows. The *mihrabs* are *not* found on the stretch of the wall which are *behind* the temple, but only at the two end sections which show in front of them the stilted columns standing upto the courtyard. This clearly shows that the earlier temple had only been improvised, in the first stage, into a mosque and what more, the original temple itself was largely composed of a pillared hall with a high ceiling. When the first mosque was organised, the *mihrabs* were fixed on either end on the back wall and some raised *dalans* at an upper level were created on three side of the courtyard. Perhaps a *minar* was also begun in an ambitious way to the north of the temple outside as a separate erection, now going by the name 'Mundara' (Pl. XXXIV) with plain circular exterior and flights of steps on the core and with unfinished or ruined top at about 30 ft. height. It would be interesting to note that in the early Tughlaq period a separate mosque was built just adjacent to and in continuation of the temple-mosque, interconnecting it and expanding the use of the mosque to both the structures—the new as well as the old. This is shown by two facts, namely, the introduction of a *zenana* gallery (Pl. XXXV) at the upper level of the back wall at the north-west end of the temple-mosque, but in a style which was clearly part of the totally new mosque adjacent to the temple-mosque; and, secondly, by the fact that a parapeted floating passage bridge from the *zenana* linked also with the present temple sanctum layout occurs here.

As far as the new mosque created to the south of the temple mosque is concerned, this had the same overall dimensions and is seven-bays wide and four-bays deep, as in the other, with similar tall stilted pillars, and three *mihrabs* at the central and end-bays—the former being more ornate and with a single dome on the central axial bay, with a corresponding annular ring (*nabhi-chhanda*) type of ceiling pattern in the centre. This dome is low, flattish in type with a shoulder, although the present dome externally could be a renovation of the original. But, as a type, this single-domed ceiling roof is itself an early one, as seen at the Lat Masjid and Bhoj Shala of Dhar. This mosque also has galleries in cloisters, in two

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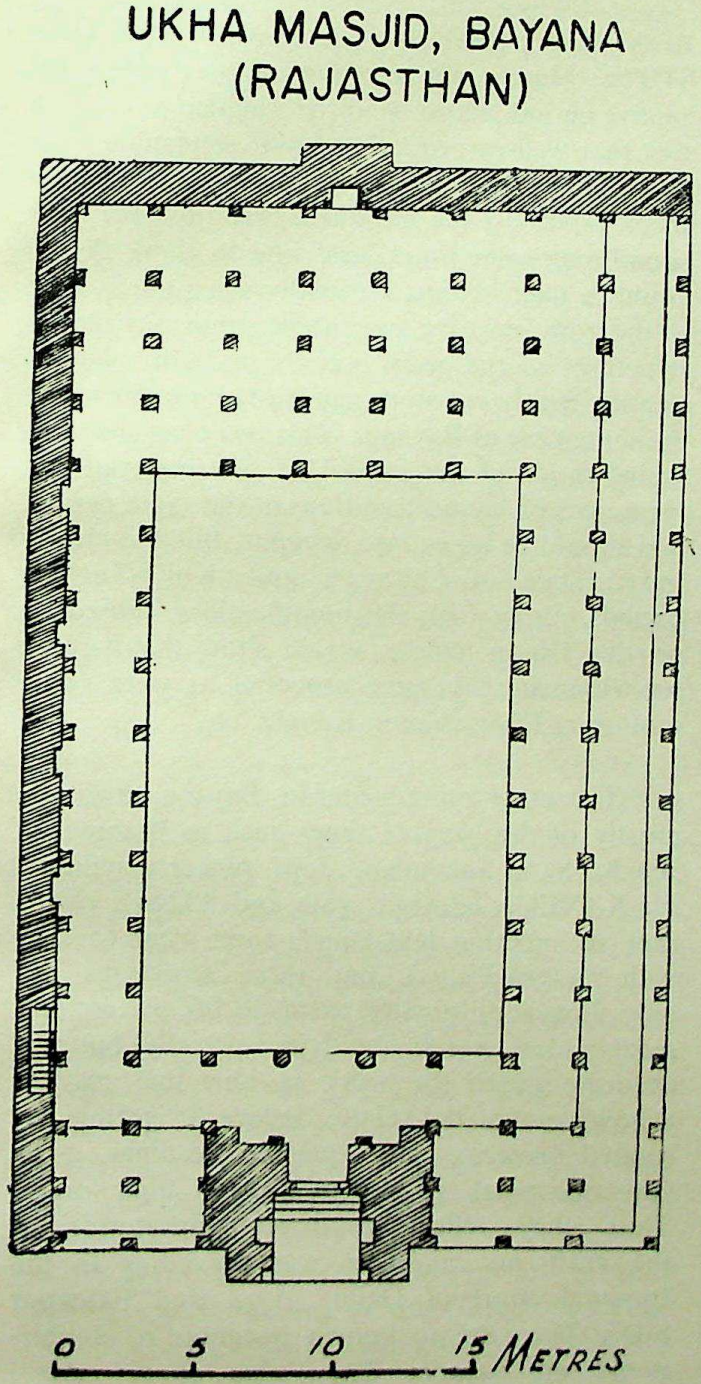
34. *Ukha Masjid, Bayana.*



storeys (Pl. XXXVI), as in the temple-mosque. The front cloister has also a privision for the upper roof and has a gateway chamber (Pl. XXXVII) in the centre with an inner tall-pillared porch, carrying a coffer ceiling and the flying arches of the Hindu type (with carvings on it—(Pl. XXXVIII) and was seemingly brought from the ruins of a Hindu temple of the 10th-11th century A.D. The outer facade of the mosque is magnificent, with dagger-edge arch. The arch is provided with a cross beam and side pilasters and ornamented with large rectangular perforated screen in the centre on the tympanum. The *mihrab* of the prayer chamber of the mosque is also of dagger-edge type with two medallions one below the other. The most significant part of the facade screen is the pair of *minarets* at either of the top corners of it, which though in truncated condition now, show an outline typical of Qutb Minar in Delhi, of alternate cusped and wedged ribs and placed exactly in the same pattern and position as in the Arhai-din-ka-Jhonpra mosque at Ajmer, of the main central screen arch, though it is of larger dimensions there. To that extent, it has to be placed after the Iltutmish period in the second half of the 13th century A.D. Thus, one would not be far wrong in saying that this mosque was built during the period between Iltutmish and Allauddin Khilji soon after the reuse of Ukha Masjid and completed in early Tughlaq times. The *mihrabs* of the temple-mosque clearly differ from that of other new mosque to the south. The *zenana* gallery, however, was seemingly added to the entire mosque spread over both the adjacent structures, in the Tughlaq period, because the feature is seen everywhere only in the Tughlaq times, such as at Mandu, Cambay, etc. Near Bayana, it is repeated at Kaman mosque (which is

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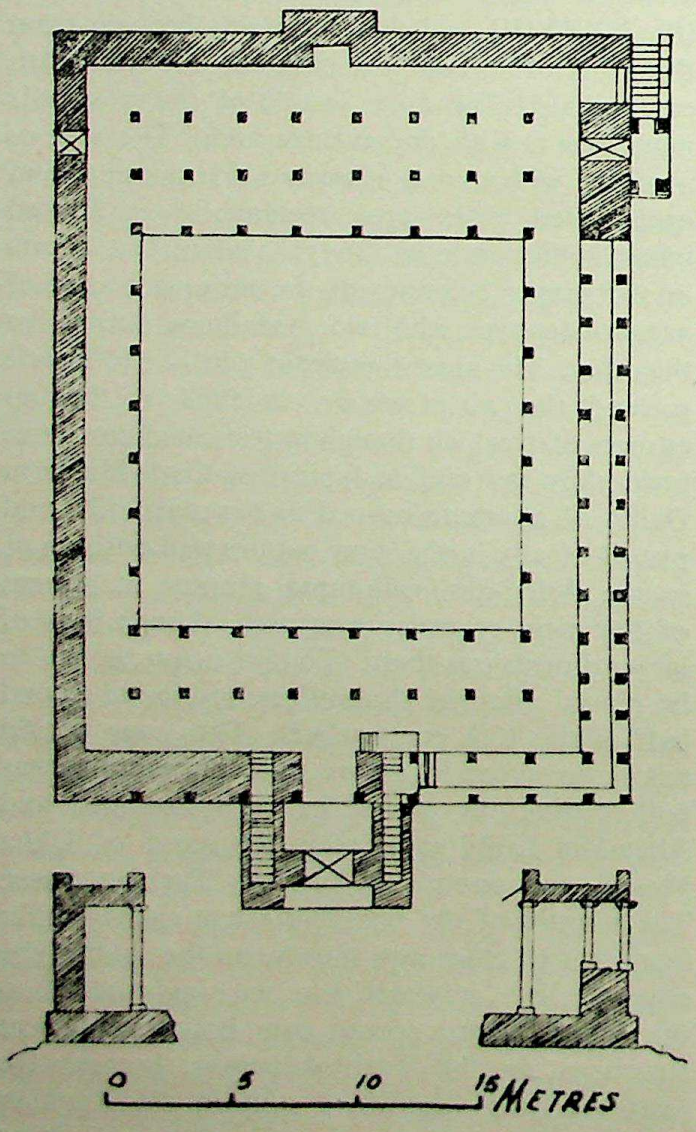
35. *Chaurasi-khambha Masjid, Kaman.*



of the same period as Ukha Masjid). Thus Ușha (Ukha) Mandir and mosque-complex is of a formative period, added to in the Tughlaq times. The fact that well-carved red and buff sandstone slabs have been used, and the condition of the monument, especially the mosque is even now perfectly sound may some times lead one to think that it could be later in date, especially when one is used to the grim, massive and rubble stone and plaster structures of the early periods in Delhi and the slender, neatly cut-stone sandstone monuments of the same time at Bayana. This is a clear diagnostic indication of the impact of raw material and the usages or layout traditions of the same period, and should be taken into account. But the clearly mixed style of Sultanate and Khilji-Tughlaq periods, along with the modifications caused on pristine Hindu temple, would show that here we are witnessing the same processes as were set in motion at Dhar, Ajmer, Kaman, etc.

The other monuments in Bayana town are mostly of the Mughal times such as Brahmabad Idgah, Sarai Saadullah, Jajri (water pavilion—Pl. XXXIX), Jahangiri gate and Akbar's *chattri* (not to mention Kalekhan's tomb near to Jajri with its *teh-khana*). But these structures not only show sophisticated trends in life pattern and secular ideals (as in the Jajri especially) but also exquisite glazed tile work in blue and madder yellow as in the Gate, besides delightful perforated screens and painted ceilings. The cut-stone work is also of a very high order. Thus, they reflect a direct importation of the craft potential, as was prevailing in the Imperial court of Delhi, Agra and Fatehpur Sikri. There are no known instances of double-dome at Bayana. They also show several

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variant types of flat ceiling. The domes, where present, form a fusion between Akbari and Jahangiri styles.

Kilokheri (*Kilughari*)

Kilokhri of today (called Kilugheri in the contemporary chronicles during the time of Sultanate and Khilji rules in the 13th and 14th century A D.) had been a highly temporary capital city, essentially under Kaikobad (son of Balban) and later under Nasiruddin (successor of Allauddin), and was only supplementary to Siri and Jahanpanah, from the latter of which it had a direct access through a gate and road, being to the north-west of it, on the fringe of the Yamuna river. Its chronicled importance lay mainly in a 'Green Palace' which was said to have been built by Kaikabad here, and other buildings of the courtiers, a good market, and some gardens laid there at that time. During the Tughlaq times, because of the nearness of the Nizamuddin area, and before the Jamaat Khana there was used by Hazrat Nizamuddin Aulia; he held his *Jamaat* in the village of Kilugheri for some time, perhaps in a mosque there which has now disappeared. Subsequently, there should have been a brief use of the area in Sayyid and Lodhi times, but its habitational revival again, took place only during the later Mughal times under Shahjahan, when it was deemed as a suburb of Shahjehanabad. It rural setting has been till recent times to this day, been largely maintained and some ruined mosques and tombs had been in vogue. The early Islamic pottery excavated from this village also seem to support its initial use in pre-Khilji and early Tughlaq times, similar to those found at Adilabad. Today it has been virtually obliterated by urban colonies. An interesting structural vestige in the place today however, is the tomb attached to what is now called the Kilokhri Masjid (Pl.XL), which is itself a late medieval and modern reconstruction of what seems to be an earlier *masjid* plinth (in restoring which even ornamental *jali* fragments perhaps of Sultanate and subsequent times ere reused in construction). The tomb in front of this mosque, however, is significant and has a single chamber, white washed today, but originally of rubble stone and plaster utilising sandstone only for the sill, jambs, beam, etc., and has a square plan on the exterior and what is now an octagonal plan on the interior. This interior change, however, appears to be fairly recent—as an in-filled reinforcement—in the form of buttresses, to the original squinch corners of the square wall, which have therefore converted it into an octagon. At the base of the dome level, internally, a drum rises carrying arched niche recesses, five on each side of the original square, followed up by a squattish hemisphere-domed ceiling. Externally, it has battlements of a simple type on the walls and on the top of the octagonal drum, the latter of which is set close to the walls. The structural evidence, on the whole, by the batter of the walls, the lack of double-dome, the availability of drum and the character of the interior which now has a *mazaar* of recent times, appears to be between late Tughlaq and early Sayyid times, perhaps placeable in the very last quarter of the 14th century A.D. or the beginning of the 15th century, Even then, it is a very useful pointer to the styles available at Kilokri, so soon after its original prosperous use under the Khiljis, and would show how the capital city under each dynasty had its own selective suburban usages which told upon

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the urban or rural propensities of the place, in course of time. That Kilugheri was not coming in the cross-roads of Imperial activity or commerce, and would have languished on that score is also clearly emphasized by its present condition and near-total disappearance of any of the early vestiges, other than the tomb described and some graves of (the later medieval) 18th-19th century A.D. in the vicinity. The models that will be relevant for the former for its understanding would be Ghiayasuddin's tomb, Kabiruddin Aulia and (perhaps more closer to it) the smaller of the Dadi-poti pair at Kharera.

Tughlaqabad

Tughlaqabad (Pl. XLI) is the first planned fort for Islam in Delhi, with specific layout and defensive purpose. It is a rough trapezium which opens out on the west in its main gate, with several other gates all around, and with a natural utilisation of the hill and valley in such a way that whatever stone was quarried was located *within* the area of the fort and after quarrying, it resulted in natural depressions formed around the main inner citadel notwithstanding the fact that the fort itself was having a large artificial lake in most of its northern side. The citadel was separately built on its higher eminence, while the immediate periphery outside the citadel occur a large series of buildings, now in ruins, seemingly for the various high officials of the State. The citadel had its own outer defences, such as bastions, buttresses and battlements, but was approached, however, by *only one gate* at the lengthwise end. It was a rough rectangle wherein the palaces were in the central high flat and the defensive establishments in the low level areas of the citadel providing also for large tanks and an underground series of cloisters with a pathway running right through in the middle. This subterranean defensive quarters should itself have been caused by quarrying of stones, the resultant depression having, however, been regulated in a very organised way, with major flights of steps at either end and other flights descending into the pit-pathway from the sides. These appear to have had provision for storage of grains also, as mentioned by Ibn Battuta. The construction is throughout of rubble stone and plaster, and these comprised several continuous vaulted chambers, a long barrel-vaulted mosque, closed from all around and thus obviating any pillar inside. The arches in vogue in the fort are both of low arched types, double arches—a smaller set within a larger one—besides innumerable types of simple pillar-lintel roofing. The plaster is rough and thick with stone chips and brick pieces and powder (*surkhi*), while the fine plaster which occurs on it was generally not thickier than half an inch. All the arches are without any cross-beam support, except at the secondary gate with a vaulted passage way occurring just in front of Ghiayasuddin's tomb linked by a bund-wall to it; all this is leading one to presume that this typical Tughlaq feature of cross beam at springing level starts from Ghiayasuddin's tomb onwards (Pl. XLII), and may thus belong to a period subsequent to the construction of the Fort. Its great area and serried lines of structures in rubble were planned for spacious civil life, but history soon enough smote it with desolation, just when the builder Ghiayasuddin was to meet his sudden death, seemingly pre-planned and the parricide was

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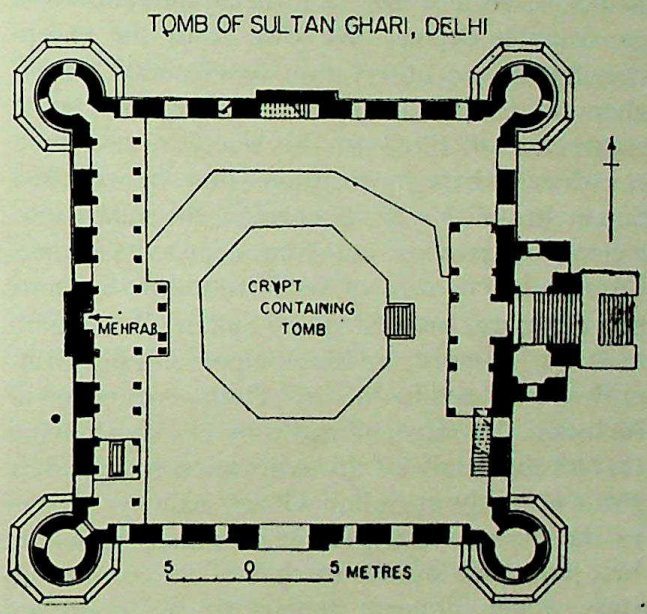
himself bitten by the bug of a change of capital to Daulatabad. The legendary curse on it by the saint at Nizamuddin was just a certification of this cruel destiny for the fort.

Sultan Ghari

Among the extensive and repairs and renovation carried out by Firuz Shah, as already noted above, at Allauddin's *madrasa* and the *Dar-ul-Aman* containing Balban's tomb, a further significant substantiation by the mausoleum of Fath Khan, royal son of Iltutmish and governor of the Eastern Provinces (Malik-ul-Sharq) is the repairs by Firuz to the two tombs of the two sons of Fath Khan (grandsons of Iltutmish) found just nearby to the south of Sultan Ghari (besides the establishment of a mosque and a *Khanqa*, which are however, in ruins—fig. 36).

Now, we see clearly the workmanship of the original tomb of Sultan Ghari—itself a buff sandstone model unusual for the age and recalling structural layout traditions which were rooted in Rajasthan, common to both Hindu temples and Islamic tombs, respectively, as from Nadol (Somesvara temple) and the mosque of sandstone at Barikhattu, Nagaur district—both of the same age. The arch and dome techniques are themselves clearly a lineal continuation of the Qutb mosque and Arhai-din-ka-Jhonpra, Ajmer, screen and its extensions by Iltutmish and Iltutmish's own grave at the Qutb area and are entirely indigenous. Lintels have been freely used, even the domes (confined to the corner buttresses) are

36. *Tomb of Sultan Ghari, Delhi.*



of ornate Hindu ring dome type internally while their outer plaster work having been provided during subsequent repairs, since a single pyramidal dome of the main mosque for the latter was seemingly a Firuzian introduction (also without drum, as the tower and of pyramidal faceted type of dome does not get introduced (alongwith its

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concomittant gable vault) before the time Ghiayasuddin Tughlaq. Even the crypt of Sultan Ghari (which feature gives the tomb its unusual name) is, as it stands, a Firuzian alteration to a considerable degree. We owe it to the exceptionally shrewd observation of General Cunningham to identify the objective and venue of some statements of Firuz (in his *Futuhat*, as noted elsewhere) where he mentions that he repaired Sultan Iltutmish's tomb, changed the square into a curve and provided cut-stone steps to its terrace. Cunnigham, in a fit of facile intuition, deduced that Firuz was only intending Sultan Ghari tomb built by Iltitumish at Mahipalpur and not Iltutmish's own tomb in the Qutb enclosure at Mehrauli. He substantiated it by clearly showing that all the details of this renovation indicated by Firuz fit nicely at Sultan Ghari, namely, repairs to the mosque dome, (which originally should at best have been similar to that of its corner buttress *minar* domes); repairs to the courtyard where the crypt structure (which should have had an open *chattri* also on it) was changed from square into an octagon, since the original square would indeed, by its corners, have been too clumsy against the mosque layout behind, besides being functionally unnecessary for a crypt pillar scheme[2]; and repairs to the stone staircase to the east of the crypt roof—which as seen by its alternating marble and sandstone layout was more a Firuzian predilection, as seen in Qutb Minar top-most storey of Firuz's time. Thus, we see that in what is otherwise one of the very earliest Islamic monuments in India, namely Sultan Ghari, Firoz had effected several specific and indeed significant though minimal alterations which, though not too obvious now to the onlooker who may take them as original work, have changed the general character of the monument, and underscore the historic processes in the conservation to monuments which become fossil evidences of the art as well as the phases of utilization of the monument. Cunningham even went further to conclude, from another statement of Firuz in regard to Sultan Ghari—that Shamsuddin Iltutmish's *madrasa* was also repaired by him—that this *also* was referring only to Sultan Ghari, as Qutb mosque *madrasa* was built by Allauddin Khalji what Firuz refers by the *madrasa* in an inadvertant reference of the record, was only Sultan Ghari, and it must have been in that the *madrasa* should have been located by Iltutmish. This is quite plausible and indeed, a full scale mosque layout with narrow aisles all around attached to what was actually the tomb of Fath Khan, does not get properly explained, unless it was essentially intended for the functional *madrasa*—for which an attached mosque is a clear need—as done by Firuz himself near his mausoleum at Hauz Khas (by locating a *madrasa* on the cloisters of the 'L' shaped tank-fringe) and here at Sultan Ghari, this *madrasa* should have similarly been arranged in the eastern and other cloisters.

Now, coming to the other two tombs just outside the enclosure of Sultan Ghari, on the south side ground level—of which only one is at

2. The square pillard scheme, which incidentally is indigenous, is seen elsewhere in the same period at Hansi, at the *Dargah* of the Chahar Qutbs showing another pre-arch phase of Islamic constructions in India of the early 13th century A.D.

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present extant—which respectively belonged originally to the two sons of Fath Khan, namely, Ruknuddin Firoz and Muizuddin Behram, the extant one (Pl. XIIIA, extereme left) is almost totally a reconstruction of the time of Firoz. This domed structure which is raised just over ground level with an octagonal plan and sill stones and solid pentagonal stone pillars resting on this sill, of single shaft, abacus, intersecting corbels, beams, flat quadrantal cornice on the beams to the outside, have the main beams resting on this octagon, converted into a sixteen-sided one and a circular one successively, laid one upon another, over which a hollow dome shell of hemispherical shape in rubble and plaster work with a slight shoulder at the base joining it to the notional drum and decorated with simple *kangura* entablatures around it on the outside. About sixteen vertical oblong slab blocks, each about a foot and a half wide and as much or more high had been underpinned below the main octagonal beam and over the corbels for support and coordination. This is exactly the same device seen in all the octagonal pavilions in Hauz Khas-complex and even as far away as at Hansi. The pentagonal pillars call for some comment because their obtuse angled adjacent facets on the outer side of the pillars, resulting in a pantagonal section for the pillar deliberately carved, is the typical Firuzian example of its kind, in functional purpose, and they are the first in a long chain of organisation of the halls for a mausoleum. The angular obtuse facets (Pl. XLIII) are carved to be in tune with the octagonel outline of the tomb plan and these pillars gradually develop into corresponding obtuse-faced screen walls at the points of the octagon and in between regular batter-arched openings of the later times, piculresquely seen in the Mubarak Shah Sayyid mausoleum at Kotla, in Adam Khan's at Mehrauli and even in some of the Lodhi tombs (Pl. XLIV). Thus, the idea behind it had certainly not germinated in the time of the Mamluk Sultans nor the Khilji period and even in Ghiyasuddin's time, when square tombs were alone the order of the day, as seen either at Tughlaqabad or Ghiayasuddin's tomb which well cover the period of Ghiayasuddin and Mohammad Shah Bin Tughlaq. Thus, while the veracity of the *Futuhat* in regard to the repairs to Itutmish's grandsons' tombs at Mahipalpur is strikingly borne out, by the construction of the tomb as it stands now, the germs of the developing of a pure octagonal mausoleum hall construction are also most persuasively preserved in the construction and attributable to Firuz's innovation. Contemporary records, thus, have served to point out the specific changes made in structural devices, and become the authentic basis for our understanding of the early Islamic stage of architecture, without which it would have been difficult even to identify these tombs. Incidentally, since the original tomb of Ruknuddin was built at ground level, no plinth had been provided by Firuz, as he did at Hauz Khas in his own erections and this again goes to show the discerning workmanship overseen by Firuz.

A tale of two cities : Hissar and Hansi

These two cities carry rich memories of the history and architecture of the Tughlaq period especially, besides several interesting fare they present. The former, as Hissar Firoza, held the pride of place,

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next only to Delhi, in the reckoning of Firoz-shah's special enterprises in civic establishments and amenities, especially of water supply, while the latter had been a city estabilished initially by Prithviraj Chauhan and had attracted several early Islamic saints and savants in its midst in the early Sultanate times, already in the early 13th century A.D. and had again several notable establishments of the time of the Tughlaqs, particularly of Firoz Shah.

We would rather do well to briefly list the more important among the vestiges of the former city. We should legitimately start with the fortification walls very little of which is now under preservation, owing to the city having trebled its capacity in space in its race for prosperity in the present century. They reveal the Firuzian predilection for rubble stone masonry combined with judicious admixture of sandstone veneer, refined ideas regarding projecting *chajjas* and balcony arrangements on battlements where even lining for the tops of loopholes have sandstone bits, where functional water works like fountains, cascades, ponds and supply channels are seen on the upper terraces of his now ruined citadel palace which stands just along a corner of the fortification, rising in as many as five storeys, of which nearly four are below the battlement level and include one or two which are truly subterranean. Of the gates only one gate of relatively smaller proportion, close to the palace area, has survived, with its Gate house interior composed of three intersecting barrel vaults originally—later rendered incoherantly confusing through several stages of conservation to the gate in the 18th-19th centuries (and even later under P.W.D.). The side projection of the cross vaults comprise side rooms and a central passage.

The Palace-complex proper (fig. 37) which has already been described by Firoz himself in his *Futuhat*, as full of mazes, fully stands up to his account and is a fantastic catacomb of both interconnected and well-laidout series of corridors and chambers, courtyards, ramps that wind up in spiral pattern all the way from the ground floor courtyard to the top floors and were seemingly intended for the prince on horse back to ride up to his private apartments without dismounting or simultaneously for ladies being carried in a palanquins safely, and provision for water facilities, through wells, reservoirs, feeding ponds and fountains, as already stated above. Like Kotla Firoz Shah, it no doubt occupied a rough rectangle but is certainly less graciously laid out than the former without identifiable divisions of the palace, and with accent on security; but like the former, however, it also overlooks the rampart walls and was thus a convenient combination of strategy and luxury, as it should have been having a moat and a reservoir outside the fort at this zone. It was apparently built in the early years of the Sultan.

We have, then, another special complex close-by, comprising the Masjid-e-Jami, the fragmentary Asokan *lat* and the gateway pavilion with an underground chamber, located just in front of the *lat* and the mosque. The layout of the mosque to quite unusual, with an 'L' shaped plan caused by a side wing to the north only, the corresponding southern side part having been occupied by a large 'L' shaped pond to be reached below ground level from the mosque by staircases which also traverse some part of the basement of

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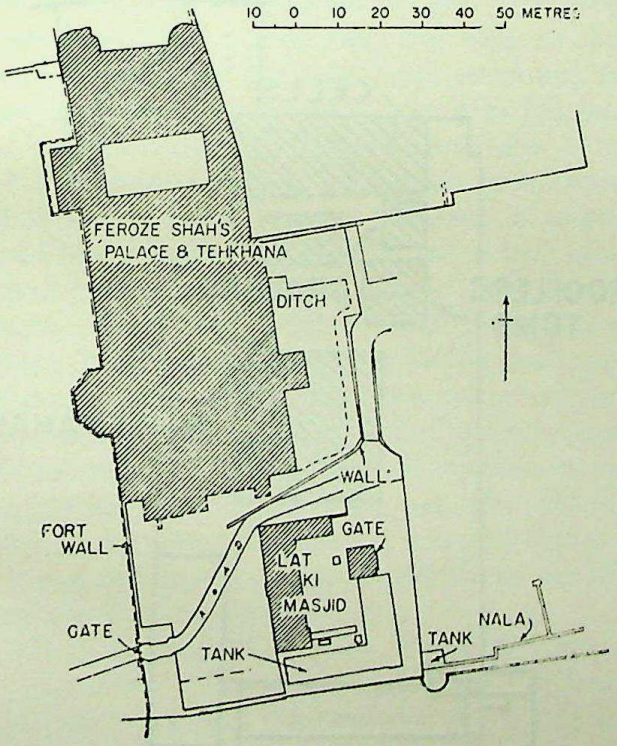
37. *Palace, Tehkhana and Masjid of Feroz Shah, Hissar-Firoza.*

FEROZE SHAH'S PALACE & TEHKHANA AND LAT KI MASJID, HISSAR (HARYANA)



the mosque. The 'L' shaped pond stretches on the south and east continuously and has a narrower pond parallel to it, near the southern limb. The eastern wing of the 'L' shape ends abutting on the basement of the Gatehouse (or *tasbih-khana* as some would like to designate it). There are only two bays for the mosque axially and five bays transversely. But there are only two domes set on the two extreme corners of the inner bay. The domes along with that of the Gate house, are rather a pointed curve. Correspondingly, the interior of the prayer hall shows a domed ceiling only in these two corners and has otherwise, a flat arch type of four-corner ceiling pattern—the like of which we see on the *madrasa* at Hauz Khas and in his pyramidal structure for Asokan *lat* at Kotla Firoz Shah, Delhi. The pillars of the mosque are all double-pillars, while wall niches are of concentric half-dome tympanum, with the back wall having one ornamental central *mihrab* with stylized dagger-fringe arch and pot-and-shaft jambs—recalling earlier Tughlaq and Sultanate devices. Special hour-glass type of loop-holes are found on the back wall thickness on the upper portion for light and ventilation. On the northern end of the inner bay, further, is a single bay mezzanine gallery for *zenana* approach by a frontal flight of steps—coordinated with another hidden flight of steps which leads to the north side *dalan* wing of the mosque, seemingly covered by screens on its facade to secure privacy for the ladies moving along. This *zenana* gallery had already become a vogue during the time of Mohammad Bin Tughlaq. The pillars of this mosque were mostly collected from Hindu temple of the 8th-9th century A.D. and later, and have all the typical carved components of the Hindu pillar 'order'. There are even quite a few instances

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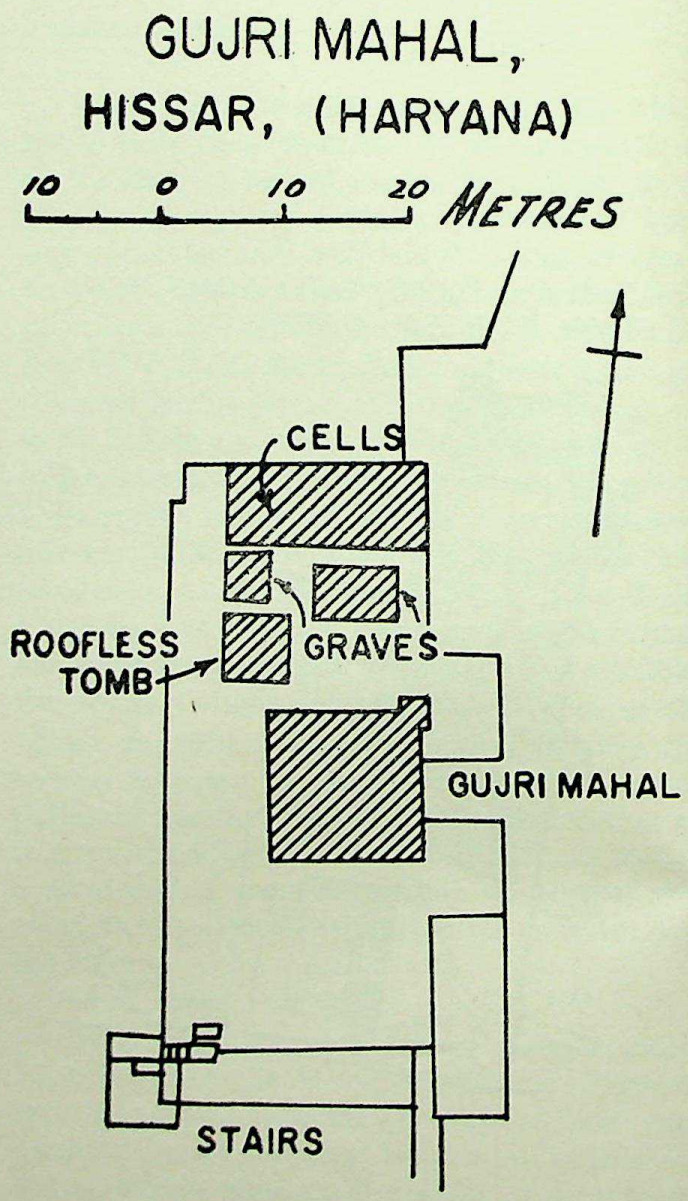
38. *Gujri Mahal, Hissar.*

of inscriptions on them of a few lines; and on one slab at the ground floor level of the *zenana*, there is now discovered a three-line record, probably of the early historic times.

The Gatehouse is of the same class as that of Ghiayasuddin Tughlaq's tomb, Lal Bangla, Bijaymandal top structure, and in fact quite a few such in plaster cover, like Firoz Shah's own tomb at Hauz Khas and like the Jahaj Mahal inner Gatehouse here itself in Hissar on its outskirts. It is of compartmental coursed sandstone workmanship with a basal plinth projecting and carrying 'pot-and-shaft' workmanship on the corners, a suffused *kangura*, an inner octagonal drum and a taper pointed bulged dome. Internally, it has half dome pendentives on the corners and in the centre, and single wedge squinch blocks on the angles of the octagon and small wall niches on the square side walls. It has four door openings and from the north, there are two subterranean passages leading to the basement cellar. The Asokan *lat* (a fragment of it, as a basal stump, the other part of which is planted, with Firozean genealogical inscriptions also seen, at Fatehabad) is carrying a tapering upper part in alternating sandstone and marble discoid bits, rising almost as high as the parapet edges of the Gate house.

Other outstanding example of the Tughlaq times in this town are the Gujri Mahal (fig. 38), a little away from this fort with palace and mosque area but outside the fort, and which is a batter-walled chamber laid on a spacious terrace and having an ornate central bay of pillars and usual arched niches on the side walls and access to the basement as well as terrace by staircases and with another flanking double chamber barrel-vaulted structure and a few tombs on a platform (probably of much later date) on the same terrace.



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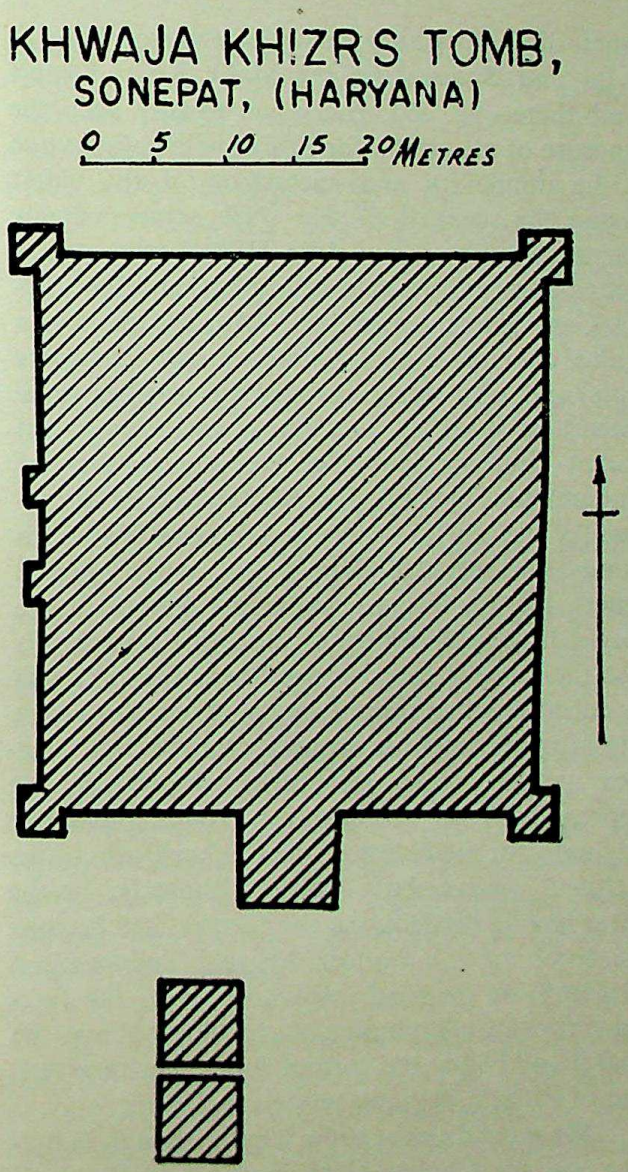
39. *Tomb of Khawaja Khizr, Sonepat.*



The *Mahal* is said to be for a favourite Gujari of the Sultan and is a dainty structure with a pleasant outlook of the country around from its side openings and is a fully sandstone veneered structure. It is thus one among the unusually large number of batter-walled structures erected during the Tughlaq times, another of which, is a part of the Gatehouse in front of Jahaj Mahal at Hissar itself, as already listed earlier, where, however, much of the wall stones having gone, it is seen rendered in plaster a little later but with all the essential features of the four door structure, as occurring in the Fort, in front of the Jama Masjid. This would additionally reinforce the view that the Kabiruddin Aulia or Lal Bangla monument at Delhi is not just a solitary successor example of the Ghiayasuddin's tomb style, but is part of a series of such structures which adorned the periods of both Mohammad Tughlaq and Firoz Shah Tughlaq (three in Delhi, three at Hissar and one at Hansi) and thus cannot in any event be later than time of Firoz, especially when at that time walls tended to become rendered sometimes in plaster rather than in sandstone and, the domes, on the top, of rubble structure in mortar and plaster. It was indeed the prime structural model of the middle Tughlaq phase.

Before leaving Hissar for Hansi, we may, however, refer to the cluster of several pavilion tombs scattered in the field just on the outskrits of the town of Hissar, and belonging to the warriors of Humayun who fell in battle during his attempt to regain power. They are all mostly of the Sayyid-Lodhi style of external and internal decorations and techniques in stone work and also having bands of blue tile work on the walls and on the ribs of the domes and are characterised by wedge-stone bands at each lintel level of the wall

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panel division which recur elsewhere also at Delhi and Sonepat (in the Malik Khizr Khan's tomb there—fig. 39). Hansi had equally been the cynosure of attraction for Firoz Shah, perhaps due to the domicility and succession of the eldest among the socalled *Chahar Qutb* saints—namely Hazrat Sheikh Jamuluddin Hansvi who was a contemporary of Mohammad Ghori and Faridud-din Ganj Shakar (who lived with the Saint in a vaulted chamber near the latter's *dargah* for twenty years) and who was succeeded by another three generation of saintly successors, variously called Hazrat Burhanuddin Sufi (contemporary of Mohammad Tughlaq). Hazrat Qutubuddin Muna-vvar (of the Sayyid times) and Hazrat Nuruddin Nur-e-Jehan Mughal Khush (of early Mughal times), all the four of whom are buried in the *dargah* here, near which in the same complex is also the mosque called Firoz Shahi Masjid, with its entrance gate, besides sundry structures of the late Mughal times all around. Outside this complex some more structures, respectively an impressive, tile ornamented tomb, planned originally for the eldest of the Chahar Qutbs by his architect friend but which ultimately, by the latter having predeceased the former, had become the tomb of the builder himself; and pavilion structures on the road side which reveal the typical vertical underpinning stone block above the corbel and below the cornice lintel, so characteristic of Firoz's pavilion models in Delhi.

We must dwell at some length, though in outline, on the Chahar Qutb *dargah* and the Firoz Mosque. The former is perhaps one of the most authentic transitional architectural specimens of the early Islamic phase, before arches and regular domes had appeared—comparable to some extent also with the chamber outside the *dargah* of Pir Turkman or Shah Vilayat at Narnaul and the crypt at Sultan Ghari in Delhi, but for different reasons. Here, at Hansi, its ground plan is unique being a simple pavilion hall of plain pillar series in the inner main part, the rest of the room divided into a surrounding corridor around it of square corner parts and rectangular middle parts, in simple domed and gable vault roofs. Except for the pillars and beams—which are supplemented on the cardinal points (at the centre of the lintel beams) by four circular pillars for additional reinforcement—the entire structure is of the brick and plaster. On the roof, the peripheral domes and vaults are well suffused within the parapets, while the central dome has an octagonal drum and a low hemispherial dome part, seemingly repaired in the Tughlaq period. The interior pillars, at the corner of the square, form a triangular unit in each corner, of which the two side ones are pentagonal, while the corner one is square-sectioned. Today, the three pillars have been closed by brick screen wall sections all around, seemingly in the thought that it would reinforce the load and also to provide a Late Mughal, plaster-cut engrailled arch shown on the hypotenuse faces of the arrangement, facing into the *mazar*, as a traditional expedient. We know, firstly, that it was Firoz Shah's buildings in Delhi which show the pentagonal pillars. They have, however, been seen even at Narnaul in Ibrahim Shah Suri's tomb, on the upper *Chattries*. Here, at Hansi, in the Chahar Qutb Dargah, they combine it with the square pillars at the corners very deliberately and lead us to the presumption that Firoz Shah, in the same manner he did at the crypt of Sultan Ghari (where he felt that square arrangement did not suit the mausoleum, modified in into a curve, octagonally, according to his *Futuhat*) had simi-

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larly converted what would have been a hall with an inner square row of pillars, three on each side by adding the pentagonal ones that he introduced in attempting to convert the square into an octagonal scheme for beam and squinch facility. This corridorred arrangement of the *dargah* with pillared inner main compartment was, thus, perhaps the most persuasive example of a *direct* use of the Hindu type pavilion for an Islamic *dargah*, already in the year 1261 A.D. when Qutbuddin Jamaluddin Hansvi died and was thus a Sultanate erection initially, which had seemingly been repaired and modified with domes in the Tughlaq times, as the son and successor of the above saint, Badruddin Sufi was a contemporary of Mohammad Bin Tughlaq. This hypostyle hall for a *dargah* is perhaps the only one of its kind in India, and would further show that during and before Balban's times, there had been only open- or closed-halled mausolea with annular ring ceilings and domes for the roof. As the ceiling of the *dargah* are covered with an awning of cloth, the interior ceiling details could not be observed properly.

As regards the Firoz Masjid, again, it may be said that its entrance gate, set at same distance from it, in much the same way he did at Hissar Firoza, is at a level which corresponds only to the mosque, although today the space in between—now a garden of some sort—has risen between Tughlaq and Late Mughal times by at least a metre in height. We also see that the Chahar Qutb Dargah to the southern side is at an even lower than the Firoz mosque, thereby giving a rough and ready indication of the changes in the working level inside this complex, over the centuries. Coming back to the mosque, we see that it has only a two-bay axial width but five-bay spread, north-south, of which the two end bays seem to have been built into double-storey arrangement by mezzanine floors reached by a central steep and narrow flight of steps within a wall arch from the main sanctuary hall. This flight of steps is set in a high narrow arch with a characteristic batter. The upper floor arrangement was seemingly for the *zenana* gallery. The roof has only a single dome on the inner axial bay over the *mihrab*. Traditionally and architecturally, therefore, Firoz Shah's authorship of the mosque appears to be well reinforced.

We have not mentioned in special detail so far the earlier mud brick Fort wall of Prithviraj Chauhan (fig. 40) which was captured by the Ghorid army and which contains within its lofty walled and massive—but now desolate—open area, quite a few significant structures including the gate. The gate is of triple, semi-circular-vaulted composition—which model is also followed in the Ghoda-gar just outside the Fort Gate to the south. The inner entrance door of the side-vaults facing into the Fort, have beautiful lintel beams of stone with a carved row of geese in the traditional Hindu pattern.

The other structure is what is called the *Baradari*—which is indeed a partially sunk multiple pillared and multiple domed structure, with two doors at the axial ends. The nature of the low suffused multitude of roof domes, reminds one of Mohammad Tughlaq's mosque at Begampuri, Delhi, in his Jahanpanah zone. Though almost entirely of brick, the pillars have, at springing level, a reinforcement by a stone block. Another structure is a water reservoir. A third complex of

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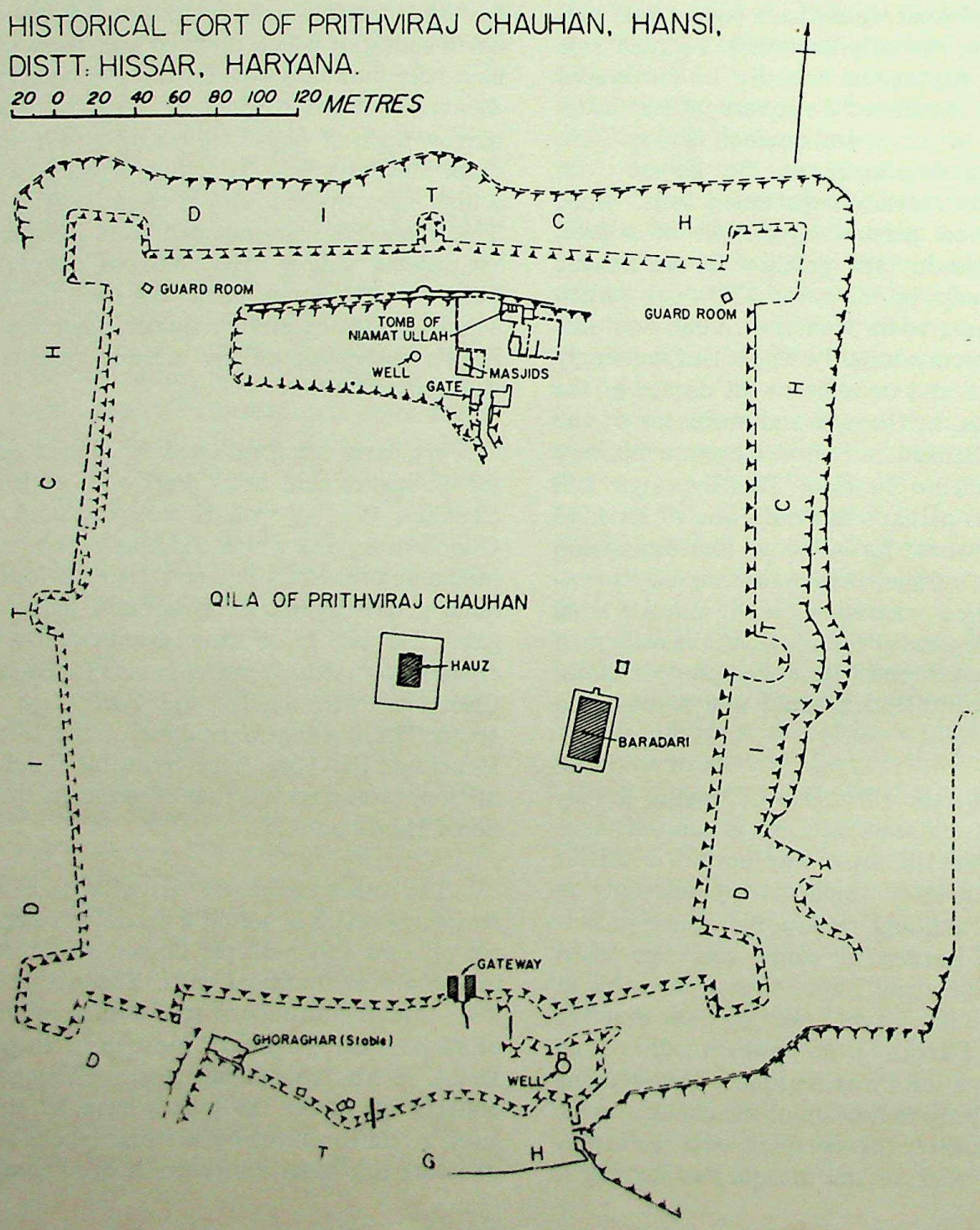
40. *Fort of Prithviraj Chauhan, Hansi.*



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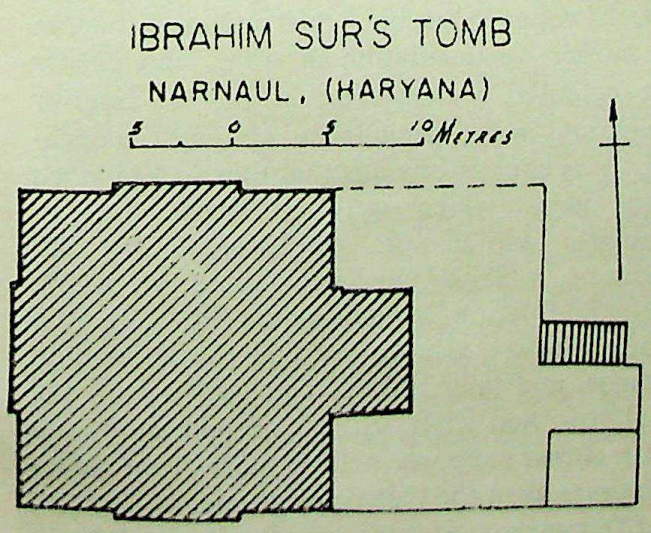
41. *Tomb of Ibrahim Shah Sur, Narnaul.*

ruined structures at western end of the fort, in the middle section, are comprising a series of mausolea, secular structures and a mosque-*cum*-tomb. This entire complex is entered into by a gateway unit. In these complexes, we have picturesque examples of pure Hindu architectural modes reused Hindu temples in the restored parts, after the conquest of the area by Ghorid invasion, and examples of Tughlaq period in the tomb and wall mosque of Pir Inayatullah which, incidentally, has on the back wall of the mosque an offset projection behind the *mihrab* which has it upper end curved towards the mosque wall—as seen in Delhi, Narnaul and Multan in Tughlaq and post-Tughlaq times. There seems to be every reason to believe that, though in decrepitude, it is here at Hansi in the Fort of Prithiviraj and in the Chahar Qutb complex, that one witnesses the faltering glimpses of architecture in this transitional and traumatic period (between 1200 and 1260 A.D.) and, later, the involvement of the Tughlaqs in this place, owing to its having been the haven of several saintly personages of Sufi Islam.



The Narnaul spectrum

Narnaul, hardly eighty miles from Delhi, was more than a vigorous centre of Islamic architecture and craft excellence. It was the gateway to Delhi politically and window on Delhi culturally. Nowhere else do we find, within a close proximity of Delhi as Narnaul is, along with other such slightly farther off centres like Badaun, Bayana, Hissar and Hansi, an assimilation and synthesis of several antecedent legacies of this early Islamic phase and transmutation of these into an identifiable *milieu* in itself, as the structures at Narnaul show. With an Islamic presence, vouched by the activities of the saint Shah Vilayat, decades before the advent of the Delhi Sultanate, and with two major phases of intense activity seen in the place, first around 1280 and the second in the Mughal phase, especially Humayun to Shahjehan, the architectural guilds at Narnaul show deep familiarity with both marble and schist, besides sandstone, and in the decorative arts of stone, paint, enamel and clay work with inlaid materials in various colours. It is in the integration of different media, in a manner not attempted elsewhere, that the Narnaul craftsmen score. It is obvious that they were conservative to a degree and, on the other hand, had to update their expertise with what is going on in nearby Delhi, which they displayed in their admixtures both in stone-cutting style and ornamentation, while there

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is a certain obsession to colour tints of various hues in the Ibrahim mausoleum (Fig.41) here and seen even in a few other instances, and prevailing conventionalism in their constructional preferences, as for instance, a mild and subtle batter they had continued to give in almost *all* their creations, during *even* the Mughal period, and in the form adopted of the Suri stamp of a high octagonal drum which all but engulfs the real shape of the dome, allowing only the upper part of this dome to be visible, they have matched it with a spectacular and rather enthusiastic surface variegation of design and colour in craft synthesis and visual elaborations of motifs. It is interesting to note that the largely Tughlaq-to-Sayyid style of construction has been adopted as the basic format of their structures. This is reflected as mentioned, in the battered walls, and the trabeate entrance to the main chamber or doors, the use of overlapping pendentive and wedge-coursed squinch scheme, in the integrated rise of the polygonal and circular *soffit* and the high concave *intrados* in the interior and in the notional double storeyed scheme for the walls of the exterior. They introduced, however, a few unique modifications, namely, the provision of a running course of merlons *even* at the middle of the wall, designating the storeyed division, setting this merlon course in a recessed band; and incorporated the *guldasta* minarets punctuating the upper terrace roof entablature regularly (in a manner comparable elsewhere with the Qutb Shahis of Golkonda) and in an ornate 'order', burgeoning out of a floriated vase at the base and becoming a fully picturised floral elegance in the stem and tip parts. The four *chattries* on the corners of the roof are, again, unique for two features, namely : (a) the placement of the eight pillar bases (which incidentally are pentagonal as in Firuz Shah's time), but in such a way as to be tangential to the curve of the dome instead of being in cardinal disposition, and (b) in the herring bone carved ornament of the stone pillar shaft which is often seen in West Asia at quite a few places in tile-work design and in India also, in similar tile work, in the Mohammad Gawan's *madrasa minars* at Bidar. The manner of their ventilator vent holes, grill windows of various shapes, staircases, the wall screen and the like is also an indication of their discerning structural planning. That the Akbari penchant for indigenous ornamental motifs had caught their imagination owing to the great scope it gave to craft competence in stone cutting and chiselling, is obvious. They also imbibed directly the typical Akbari floral corbels ending into a drooping bud pendant, Their organisation of the interior decoration with richness, variety and zonation is another trait which seems to have been inspired more by Deccani or exotic norms. But their primary contribution is in the synthesis of raw material vogue in marble, schist and sandstone, in the mosiac ornamentation in stone, and plaster with coloured enamel skin, as on the interior domes, and in the spaciousness of their imagination. It is equally obvious that they had imbibed layout ideas which were as much Suri as Jehangiri, as in the Jal Mahal (fig. 42) panorama, in Shah Quli Khan's tomb (Pl. XLV), and in the Ibrahim Sur mausoleum (Pl XLVI A-C) itself. Nowhere else do we find the integration of earlier and later motifs together, as with the floral base and shaft scheme of their jambs and plinth corner supports—which start from Sultanate times as in the Qutb mosque *maqsura* screen, Alai Darwaza, and later, in the dagger type of

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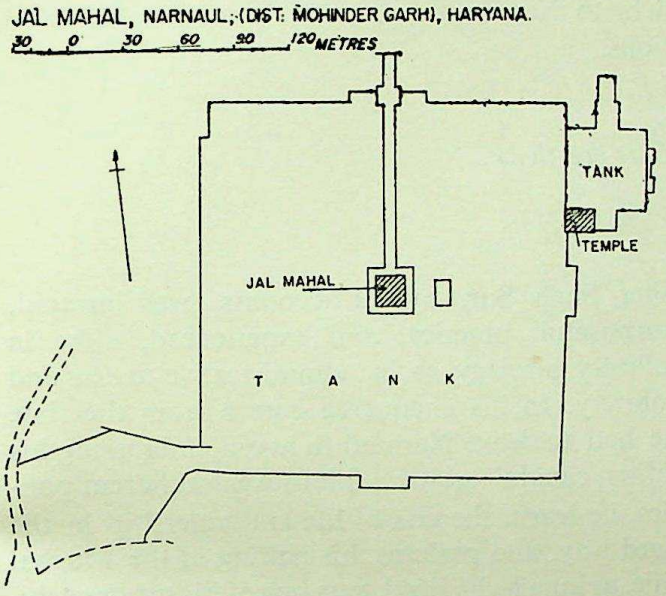
42. *Jal Mahal, Narnaul.*



edges for their arches of the *mihrabs* (which again start from the Alai Darwaza and go on in Delhi upto the Lodhi times), in the adoption of mild *curved* fusion of the top of the rear buttress of the *mihrabs* (as in Ibrahim Sur's *Rauza* mosque wall exterior)—a feature which we see, as pointed out elsewhere, in several Tughlaq structures in old Delhi and in the tomb of Shah Yusuf Gardizi at Multan (1350). It is this capacity as the continuators of the craft tradition of successive centuries in early Islamic India that bring them out as synthesisers of tradition. Of course, in the Shahjehan period, they certainly display an inspired, fantastic skill in undertaking such massively elaborate erections as the Chatta Rai Bal Mukund Das (Pl. XLVIIA-C) whose five storeyed rise including an elaborate *teh-khana* and a multiplicity of layout features like cloisters, courtyards with ponds decorated with fountains, the *hamam*, projecting balconies, ridged or ribbed vaulted domes, *jharokas* and in the incessant bracketed eaves-boards are most spectacular. Even their finials to the domes have a stamp of their own, with well raised petal tips and floral full bud ornament in the centre. Their aim appears more to transform and absorb than to imitate.

The *substratum* situation of Narnaul is however, best summarised, in the *dargah* or Pir Turkman or Shah Vilayat, which is located immediately to the south of Ibrahim Suri's tomb also called *madrasa* because it integrates a mosque also within its interior. This *dargah* has its entrance of Tughlaq style (Pl. XLVIIIA) with side pavilions at higher level and a central opening and a spacious courtyard within, to whose west is located a separate later mosque for the complex. The *dargah* is located on the inner right and is approached from a door on its west side. This square chamber has a frontal transverse porch which has been totally renovated in the British period. What, however, is of cardinal interest is the outer flanking chamber to the west (Pl. XLVIII B) entered from the porch, and the *dargah* itself. The former has the typical 'coffered' ceiling (Pl. XLIX) of stone set in diagonal pattern over lateral horizontal ceiling slabs, successively in three courses, to arrive at the 'coffer' recess sealing the ceiling. This was obviously an arrangement that is patently indigenous of long standing and which was current at the time the saint was living here at Narnaul, at and before the year 1137 A.D., as shown by the inscription on it.[3] This would show

3. This 'coffer' ceiling of indigenous origin, is, however, continuously used in severed other subsequent contexts, in the Qutb enclosure, Delhi, at Hisar and at Hansi and is no doubt finding preference in the Tughluq period,

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the pre-Sultanate phase of Islamic architecture perhaps uniquely preserved at this monument only, It is sometimes said that such coffer ceilings, seen in Qutb mosque complex and Arhai-din-ka-Jhonpra at Ajmer, may be the transitional phase before Islamic curved dome. But, in those cases, they were reconstructions out of old materials and hence a re-use or imitation. But here in the *dargah* chamber, they were especially built for the *dargah* itself at that time and hence in original context. The *dargah* chamber itself is provided with overlapping pendentives on the corners supported over a wedge-coursed squinch scheme, as found in the time of late Khilji and early Tughlaq stage, but the organisation of the *soffit* and the *intrados*, seems to indicate that this was more appropriately of late Khilji phase, as is sufficiently also supported by the rather low smooth curved dome profile on the exterior on the roof. There is no doubt that the *dargah* construction as it stands, is, despite changes, formative, planned with only one door, without any external ornamentation, in square plan, and with no scheme of windows on its walls. It is, however, quite possible that the central parts of its three inner walls had been sealed mainly by the subsequent additions of gate, etc., around it, besides other structures occuring on its west, during the Tughlaq phase, but would otherwise have been originally of an open-arched pavilion scheme for its walls, in the typical Khilji style. All told, by the cumulative evidence of the flanking side chamber of the *Dargah* and the main grave chamber itself, we have not only the solitary example of a pre-Sultanate Islamic erection, but also a fairly early renovation to the mosque, already in the Khilji and early Tughlaq phases, as in Delhi. This places early Islamic style under debt to Narnaul in its most formative formulations.

Surī erections

Sher Shah Sur, by all accounts, was intrepid, purposeful, practical and experienced, alike in military strategy as in administrative *finesse* and sobriety. In his chequered career from the time he had to leave Narnaul to avoid embrassing his father caught between filial love and harem politics, he learnt the arts of life and rulership in the hard way, and perhaps, his halting of the Mughal tide, as long as he lived, was one of his greater achievements. When it came to constructions, despite the fact that he would have hardly found time amidst his assiduous programmes to win a mighty following, he turns out to have been equally ambitious. In all, he has four major construcions to his credit, two at Sassaram, his native *fief*, one at Purana Qila (Delhi), and one at Narnaul. It is remarkable that his pride in his Suri line should have guided him in erecting a mausoleum of some note for his grandfather Ibrahim Shah Sur at Narnaul, for his father Hasan Shah and for himself at Sassaram single-handedly. His Qila-i-Kuhna Masjid at Purana Qila (Pl. L) was erected seemingly to perpetuate, as a thanksgiving, his spectacular stroke of victory over the over-confident Humayun.

There is no doubt that, alike in his Narnaul construction as in his lake-mausoleum at Sassaram (figs. 43a and b and Pl. LI) which was completed three months after his death and inscribed

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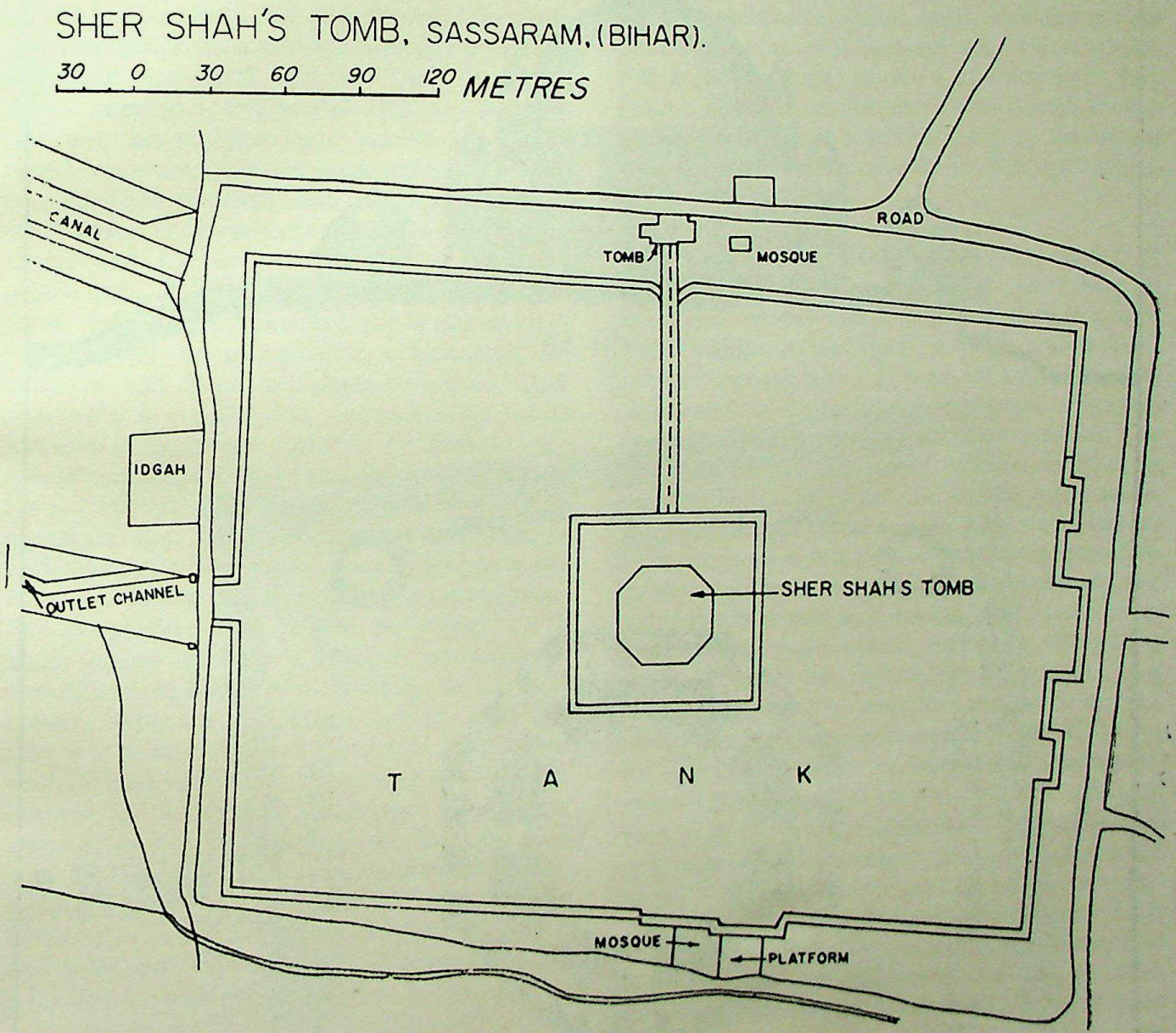
43a. *Sher Shah Sur's Tank mausoleum layout at Sassāram*



43b. *Sher Shah Sur's Tank mausoleum, plan and Section.*

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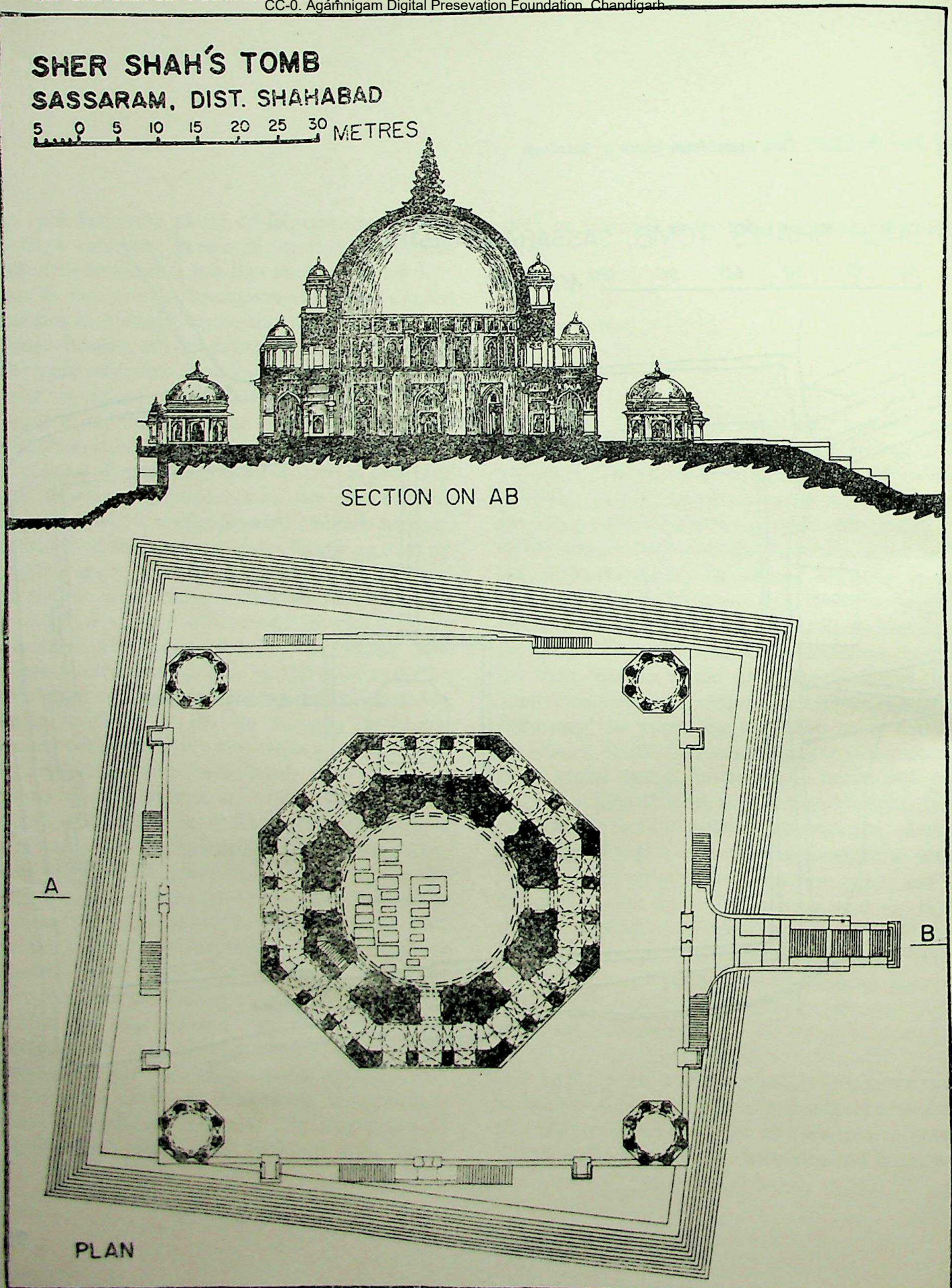

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by his son Islam Shah Sur, he had vindicated significant imaginativeness notwithstanding the several differences that mark the two. The fact of the matter seems to be that in each area, he—or more plausibly his architect—was guided by craftsmanship and tradition, the predilection for colour contrasts and for antecedent and local Firuzian traditions as at Narnaul, by Lodhi norms, as at Delhi, and by his own local partriotism and giganticism, as at Sassaram. There is also no doubt that, in his reckoning, the Sassaram creations should be his greatest achievement. So indeed it was. Bihar had never before nor after seen such a construction, unusual alike for its location, as for its composition. *Jal Mahals* were not uncommon in Upper India (both under Hindu art and Islamic), but it is the manner in which he organised what was evidently a pre-existing tank with inlet and outlet sluices, into an island by the massive causeway reaching up to the central ghat-like peripheral steps which he raised to a much higher level by a massive embankment embellished with *chatttri* or pavilion on the four corners within the top parapet coping, and then set about to raise in this rather circumscribed area, an octagonal tomb. It is sometimes felt that the absence of a regular plinth for this central mausoleum is a glaring omission. But any one who has examined this massive creation in the midst of water will note that his foundational preparation could not have been more adequate and he seemingly followed Sayyid pattern without a parapeted plinth for mausoleum.

The octagonal tomb had an in-built mosque wall and rear projection on the western cardinal facet. It rose with three open arches on its outer verandah along with massive cornice and battlemented entablature, within which were *chattries* on each of the corners of the octagon. From within this rose the high drum—a characteristic Suri feature, whether at Narnaul or Sassaram itself—having merlons on top and encasing the rising dome whose semicircular dome part sat smugly on the drum.

Architecture undoubtedly gains a lead over ornamentation in this structure; and there is equipoise, repose and cumulative harmony over mere assiduous dexterity in ornamentation or compartmentalization. It is a hunch of the present writer that in the middle of the water, there was indeed originally an inner pond, over which Sher Shah allowed his mausoleum scheme to float by substratum spanning devices, so that water action may not directly undermine it. This hunch has not been proved yet, but the fact that corner pavilions at the tomb level on the high embankment had consistently shown a centripetal tilt, by the ravages of time, would seem to indicate a water-body at the very core-base below the mausoleum. It is also an oft-repeated issue that the Sassaram tank embankment at the centre has an eccentricity for its sides, in relation to Sher Shah's octagonal mausoleum sitting on its top and the strike of the causeway from the main bank. The integration of a mosque wall however, on one of its octagonal facets with its fixed *qibla* enables one to rationalise the consonance that the orientation of the tomb and its symmetric relationship had to have with a strike of the causeway and not so much with the outline of the lower ghat. The variation in regard to the main stepped ghat below, thus, would not be germane to the issue; more so if, as was probably the case, it was a pre-existing feature of a pre-Islamic tank whose layout Sher

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Shah did not wish to disturb or modify. If perhaps a shaft is sunk in the outer ground around the tomb level on the top, one may encounter the system of arches or the foundations on which Sher Shah might have reared the mausoleum with the water body still below, as indeed he did for the causeway which, later in the British period renovation, was made into a solid piered system. Buchanan saw it as an arched system earlier to this repair.

Even his fairly large creation of a tomb for his father in the heart of Sassaram town, perhaps does not compare with this setting, and an imitation of this by his son Islam Shah for his unfinished mausoleum had also been commonplace.

All the four erections of Sher Shah mentioned, would bear being dated between 1540 and 1545, some more explicitly by inscriptions, as in the case of his own mausoleum. This only shows how, notwithstanding certain typical Suri mannerisms, such as the batter, octagonal plan, the high drum portion consistently displayed, the rather flattish topped dome, and the magnificent cut-stone work and the preference for large *chattries* on the corners—which latter could be drawn from the Akbar to Humayun Mughal style—regional traits as well as Imperial Mughal traits have both gone into the making of Sher Shah's mausoleum. Since we find that the batter and the high drum are displayed uniformly in *all* the monuments at Narnaul at various period, one suspects that the craftsmen even for Sassaram, might mostly have been drawn from Narnaul by Sher Shah; In Ibrahim Rauza and in the Sassaram mausoleum, the architects have been named as Niyazi and Alawal Khan respectively. This latters' own tomb is found at Sassaram and bears a general outwork which is more Mughal in its high entrance gate with overhanging balconied *chattries* supported on bracket corbels from below—a prevailing pattern. In any event, the largeness of the conception of Sher Shah's tomb at Sassaram clearly reinforces also the presumption that the unquestioned popularity he enojoyed in his times, especially in the eastern parts of the empire, should have elicited a willing participation of a very large number of stone cutters and workers in the erection, as a tribute to his leadership, and became a 'fitting epitaph to the soundness, large-heartedness and conventionality of Sher Shah as a natural, charismatic leader'. At a time when the Imperial Mughal power after Akbar had already much to offer in architecture, the Suri architecture managed to retain its special traits and claims a place under the sun, in the Islamic architectural growth spectrum.

Jaunpur

The purpose of estabilishing a city at Jaunpur by Firoz Shah had already been explained as a strategic need to manage the eastern dominions of the Tughlaq empire for which Bengal would have been too far away and Badaun and Delhi itself either too near the Imperial capital or impracticable. The Jaunpur centre was, however, most unexpectedly to sever its links with the Tughlaq Delhi, thanks to the cataclysmic Timur invasion of Delhi in 1398 A.D. Hence, taking the opportunity by the forelock, Malik Sarwar founded the Sharqi kingdom. It is said that the crumbling of

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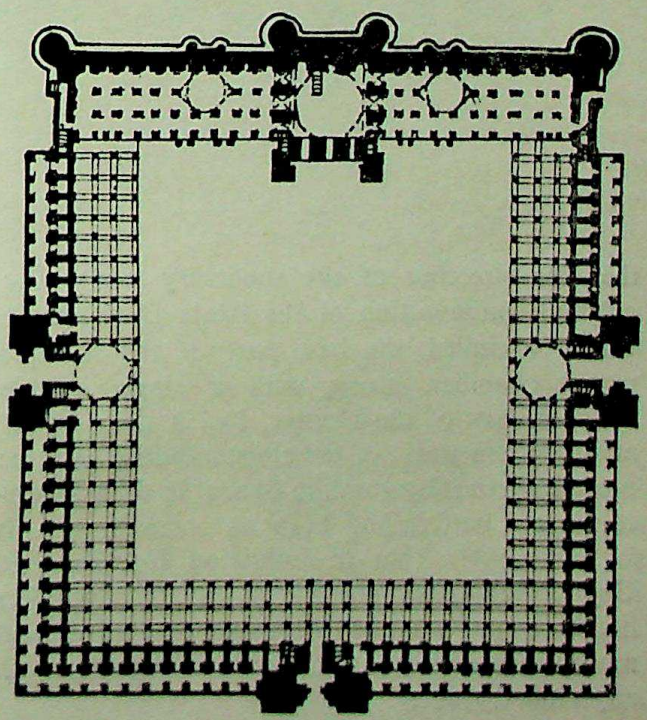
44. *Atala Masjid, Jaunpur.*

the Tughlaq empire at Delhi was even otherwise exploited elsewhere at Sind, Gujarat, Malwa and Bengal, each of which followed suit in declaring its independence. But it can be said that it was the highly centralised power at Delhi and its total dependance on the power-thirsty regional governors in these far-flung Tughlaq dominions that gave an edge to the seizing of power, when Delhi was in peril, by these opportunist chieftains.

Jaunpur area, however, rose to prominence only from the third king, Ibrahim Shah Sharqi (1401-40) and the last Sharqi, Hussain Shah (1458-84) who, however, despite his constant warring with Delhi was less than a match ultimately for the Imperial Lodhi (Bahlol Lodhi) with whom he had came into serious conflict and which cost him and the area, a local empire, for good.

When Firuz created a new city (in 1358-59) at Jaunpur, quite separate from the already flourishing older town, he also had to sow the wind (by his resolve to exterminate the famous Atala Devi temple there) and reap the whirlwind, and finally agree to allow the temple to stand. Starting with a mosque built by Ibrahim Naib Barbak, a brother of Firoz, in 1376, the mosque pattern of Jaunpur for some time, was very much attuned to the Hindu temple design elements. While Firoz himself began Atala Masjid in 1376 it was to be finished only by Ibrahim Sharqi in 1408. Two more mosques the Khalis Mukhlis and Jhanjhri (Pl. LII) are now a pile of ruins, but the former was, again, built on the site of a Hindu temple.

The Atala Masjid (fig. 44 and Pl. LIII) followed the general pattern of a four-cloistered mosque, attached clumsily to the main sanctuary whose rear corner buttresses alike followed the Firozian circular sectioned battered minaret type, while the south, north and eastern entrance porch outline was of a squarish base section and with a medium sized screen wall against which its porch *minars* were set—as indeed was the main propylon itself on the sanctuary facade in the central axial bay. This bay was a single large hall with a massive dome. There is a near total disharmony in the levels of the propylon, the domes and the ceiling level, and the subsidiary smaller pylons of



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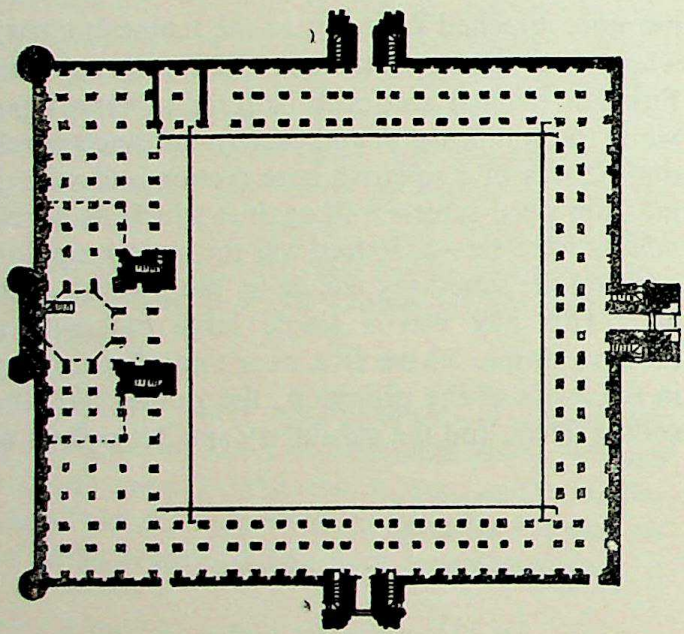
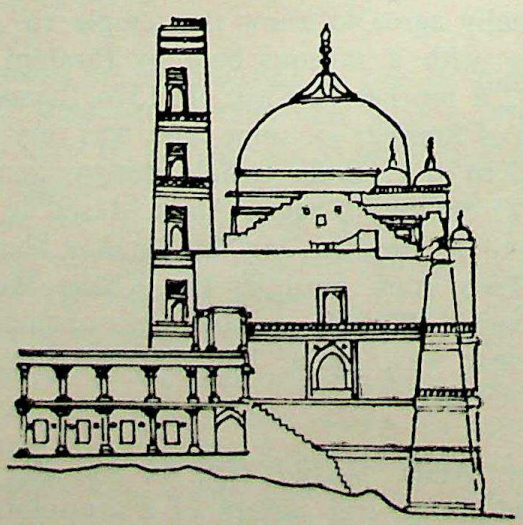
45. *Lal Darwaza Masjid, plan.*



46. *Jami Masjid, Jaunpur, side elevation.*

In this regard, the Lal Darwaza masjid (fig. 45) of the time of Mahmud Shah Sharqi (1440-56), though smaller in plan, is more compact and with a sense of proportion and absence of mere giganticism. Even its pylon and intervening high arched entrance has a more sober look than the monumental erection in Atala Masjid which lacks the aesthetic appeal. Perhaps, Lal Darwaza Masjid had followed the indigenous temple layout scheme essentially and had therefore been able to present whatever organised look it

the side stretches of the sanctuary front. The original configuration of the Atala Devi temple which occupied the best part of the mosque prayer chamber, along with a single double storeyed bay of the cloister, had a clear layout and the extra width of the cloisters added by three more bays to it by Ibrahim Sharqi in the converted mosque pattern had been an encumbrance. It is very likely that in following Firozian and Gujarat Sultanate styles for mosque, the builders had been more obsessed with size, dimensions and multiplicity of ornamental *jalis*, rather than with any unified grace.



29. Idgah at Badaun.

30a-f. Shamsi Jami Masjid, Badaun, from the south-east, showing façade, mihrab; entrance arch and ornamentations.

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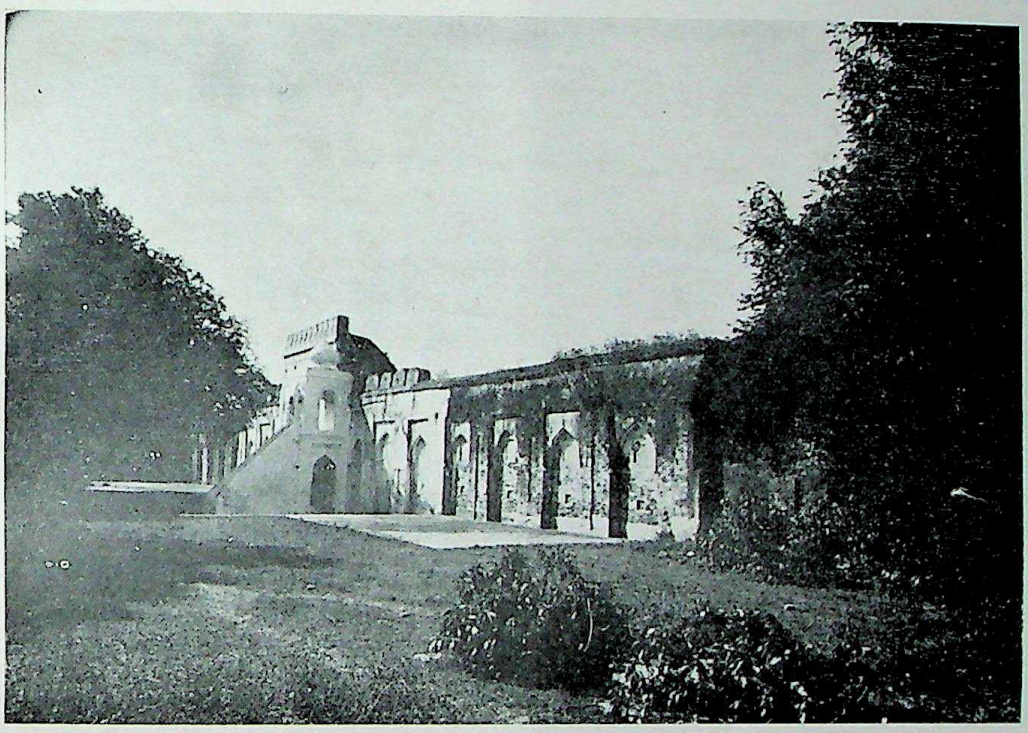

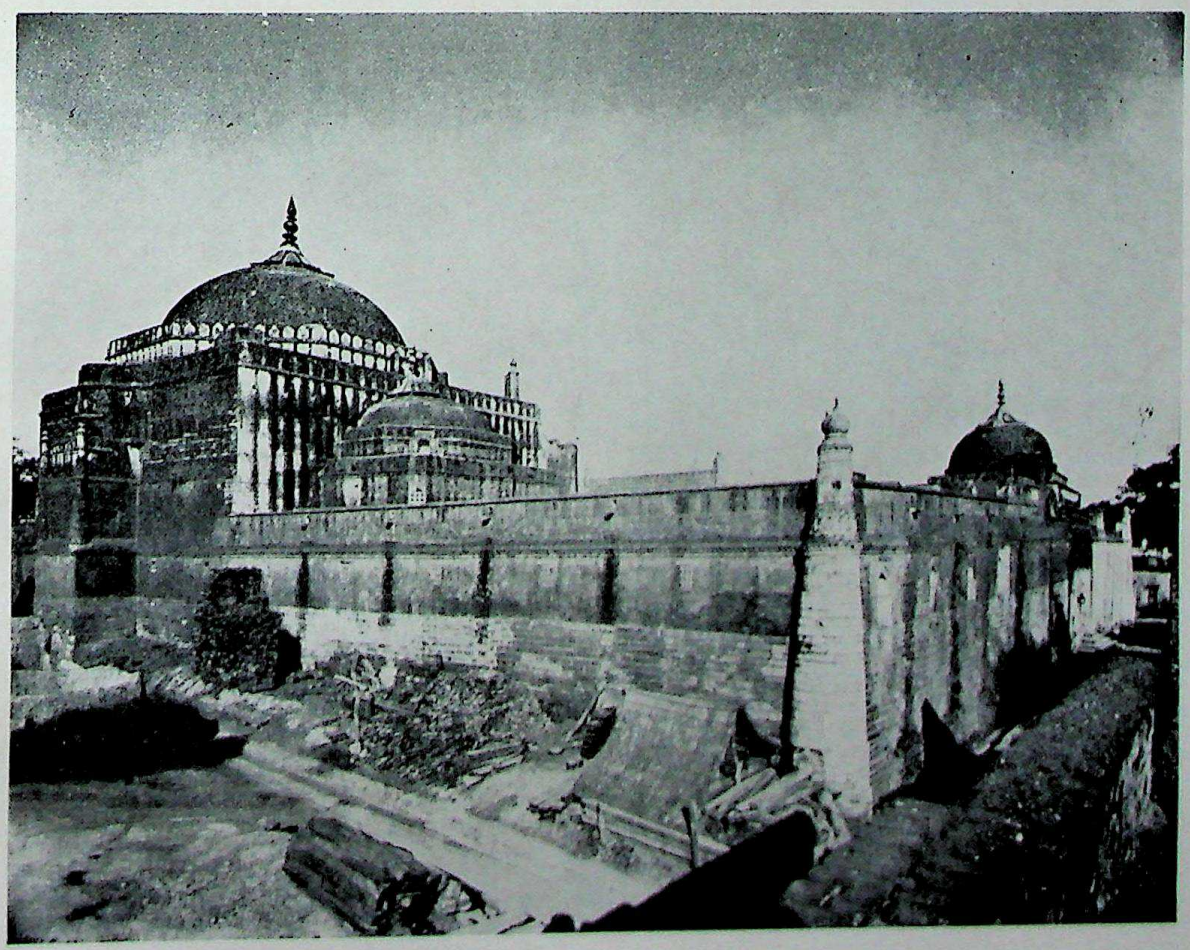

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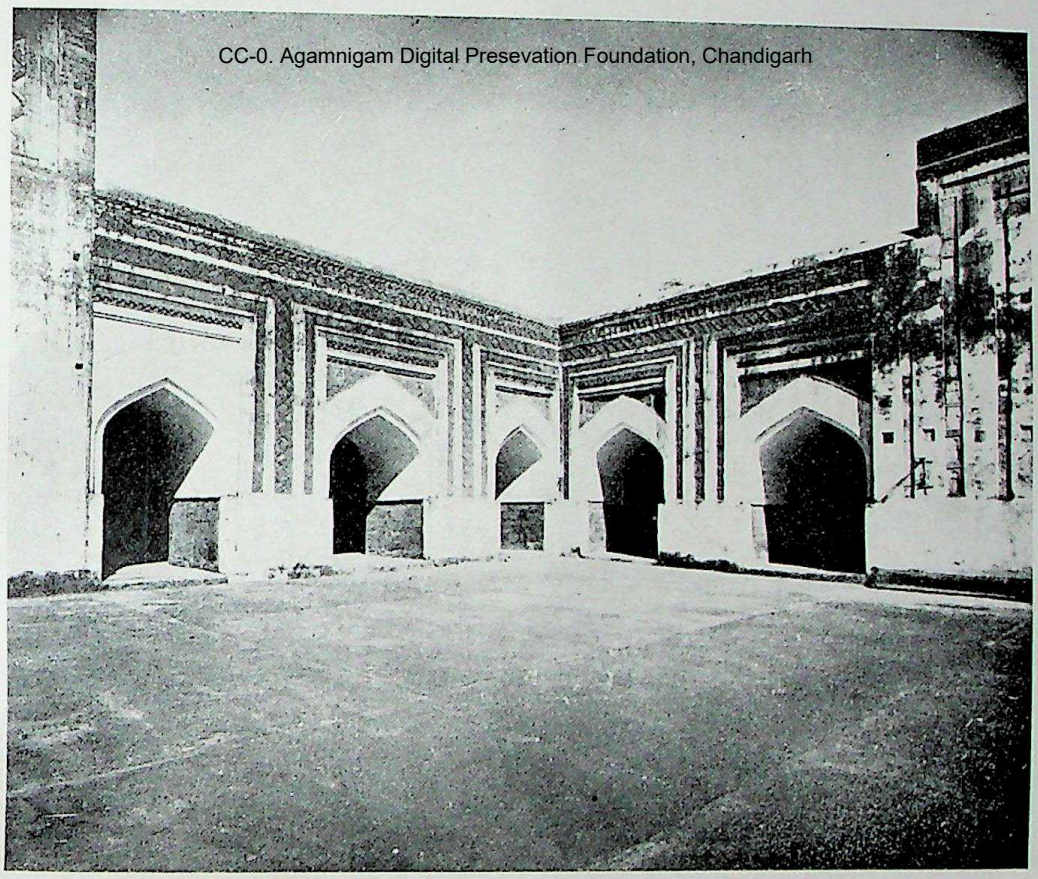

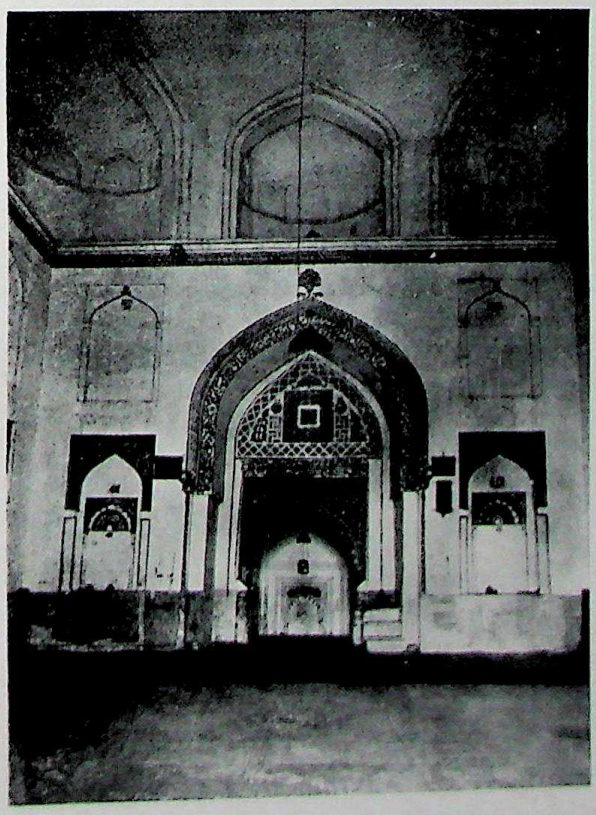

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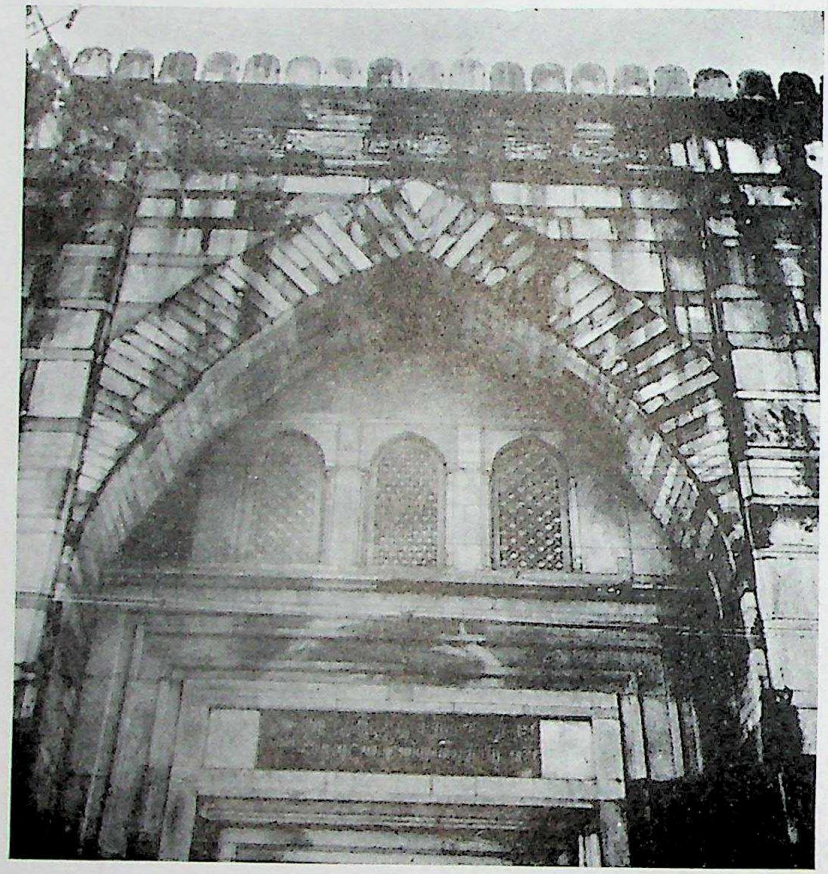

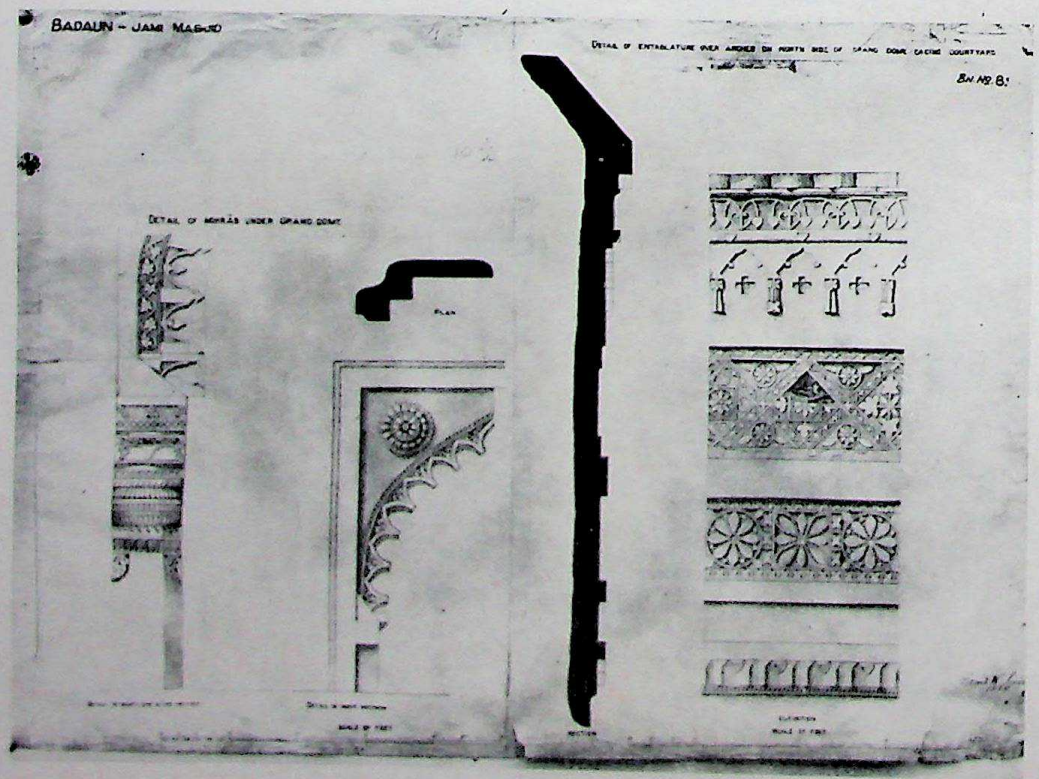
BADAUN - JAMI MASJID
DETAIL OF ENTABLATURE OVER ARCHES ON NORTH SIDE OF GRAND DOME CENTRE COURTYARD
BM NO. 8.
DETAIL OF MIHRAB UNDER GRAND DOME
PLAN
SECTION

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31. Tomb of Makhdum-e-Jehan, Badaun.

32. Ukha Masjid, Bayana.

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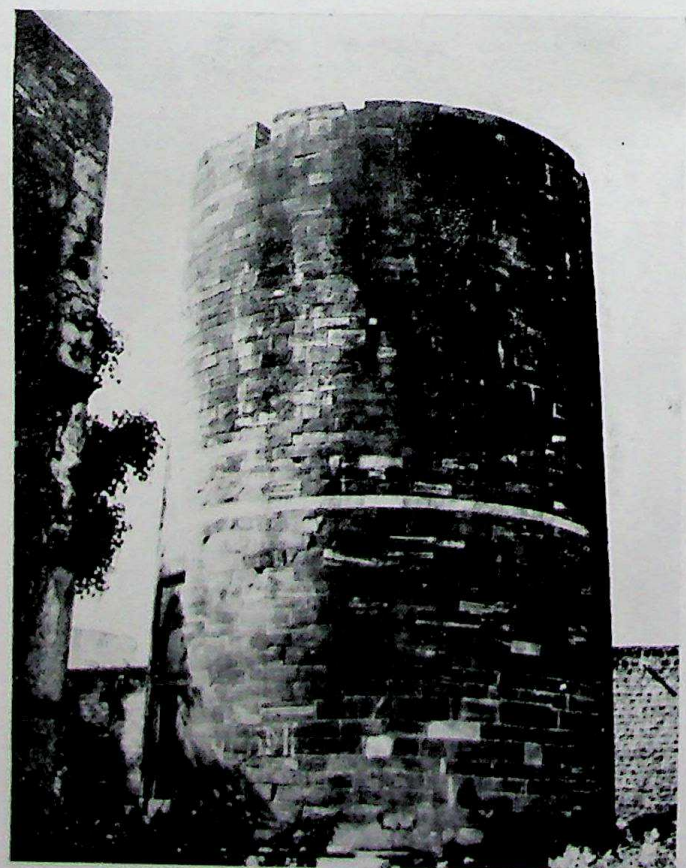
33. Ukha Mandir, Garuda banner pole.

34. Mundara Minar, Bayana near Ukha Mandir.



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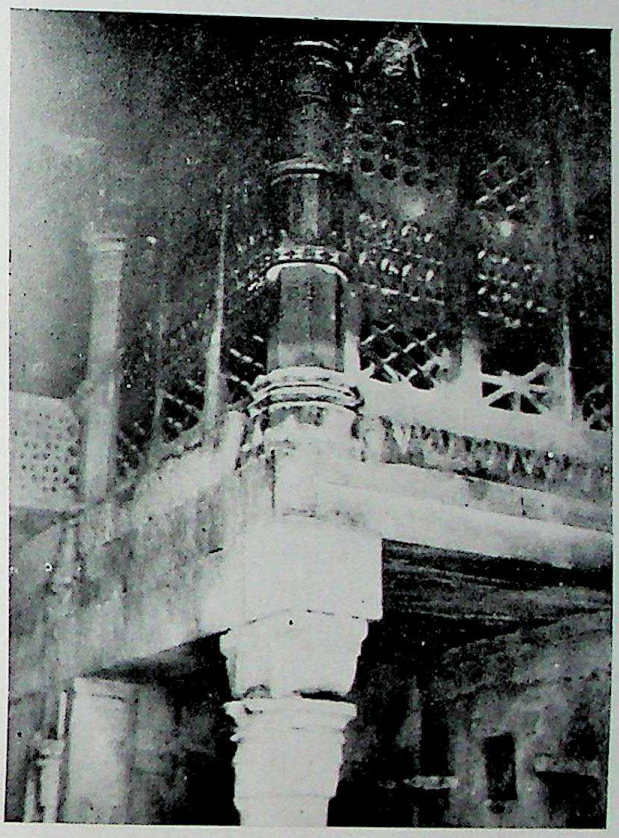
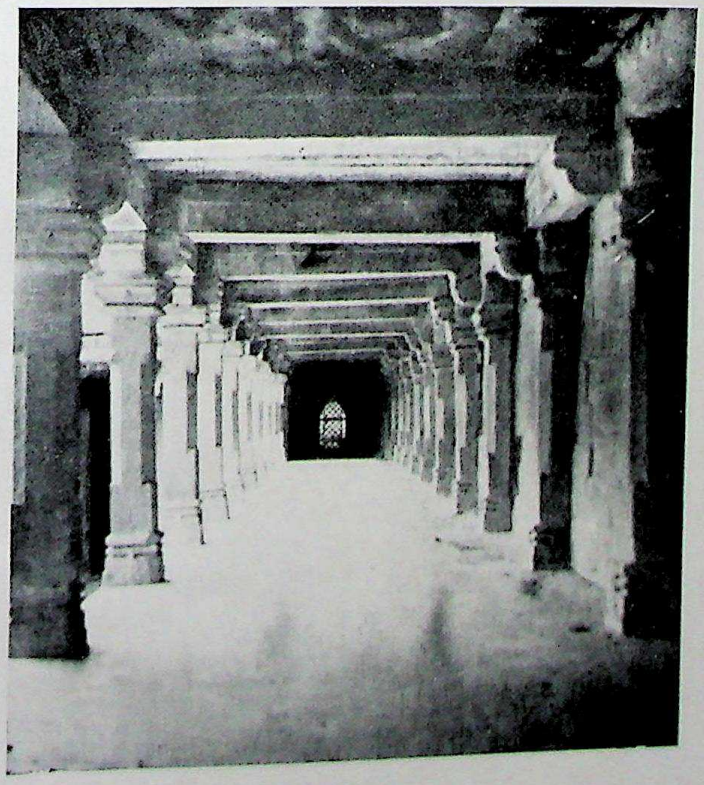


35. *Zenana* Gallery and cross bridge, Ukha Masjid, Bayana.

36. Upper floor closter, Ukha Masjid adjunct-mosque.



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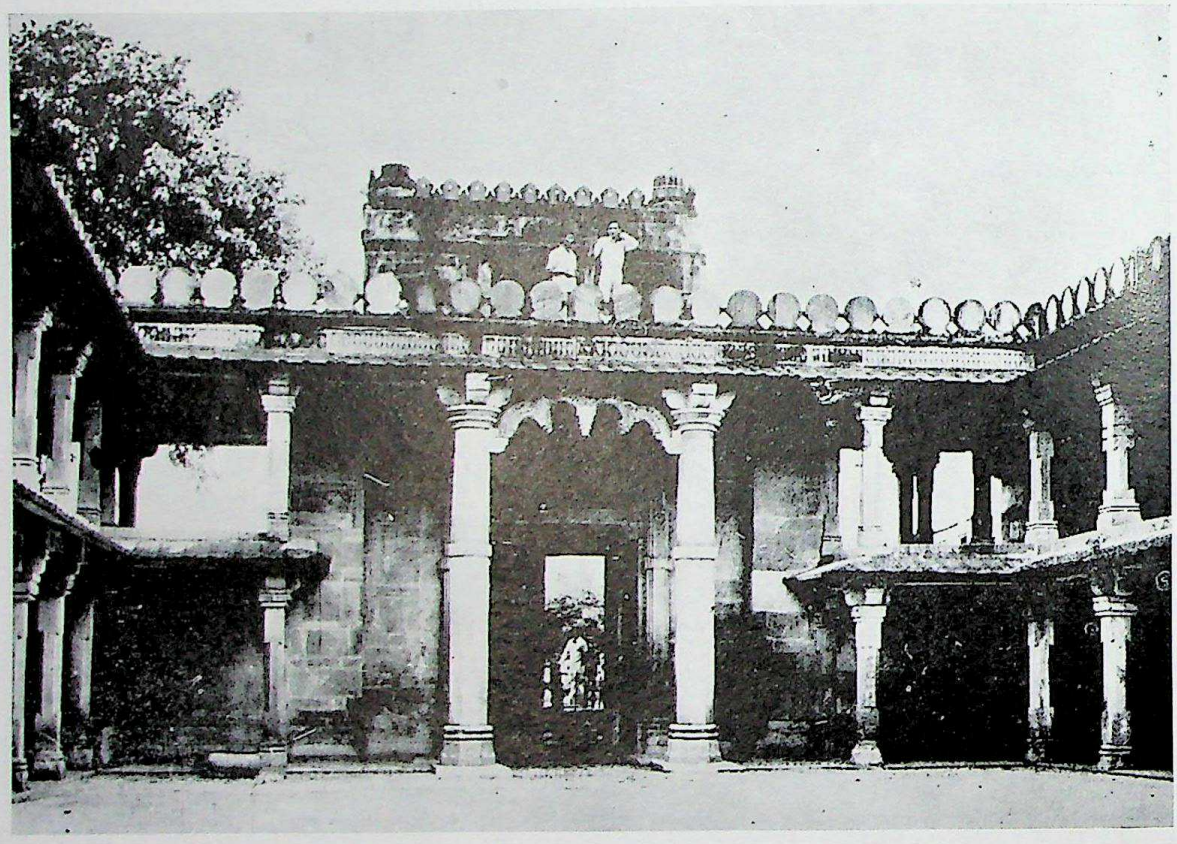
37. Ukha Masjid adjunct-mosque facade (from inside).

38. *Vandana mala torana* of inner porch of Ukha Masjid.



39. Jajri (water pavilion), Bayana.

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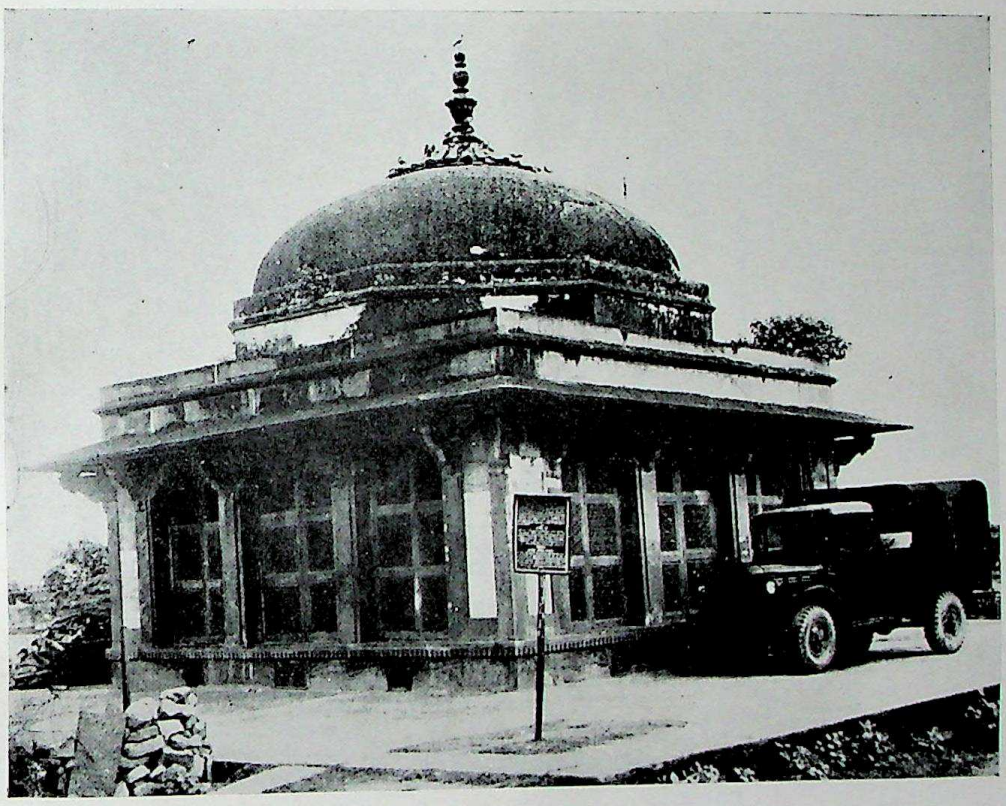
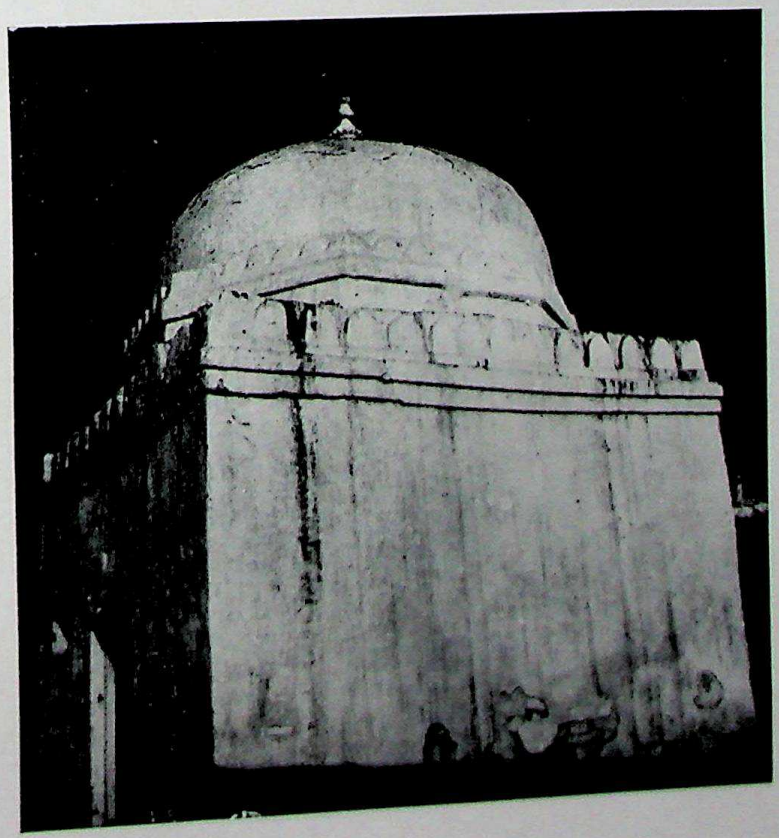
40. Tomb attached to Kilokhri masjid.





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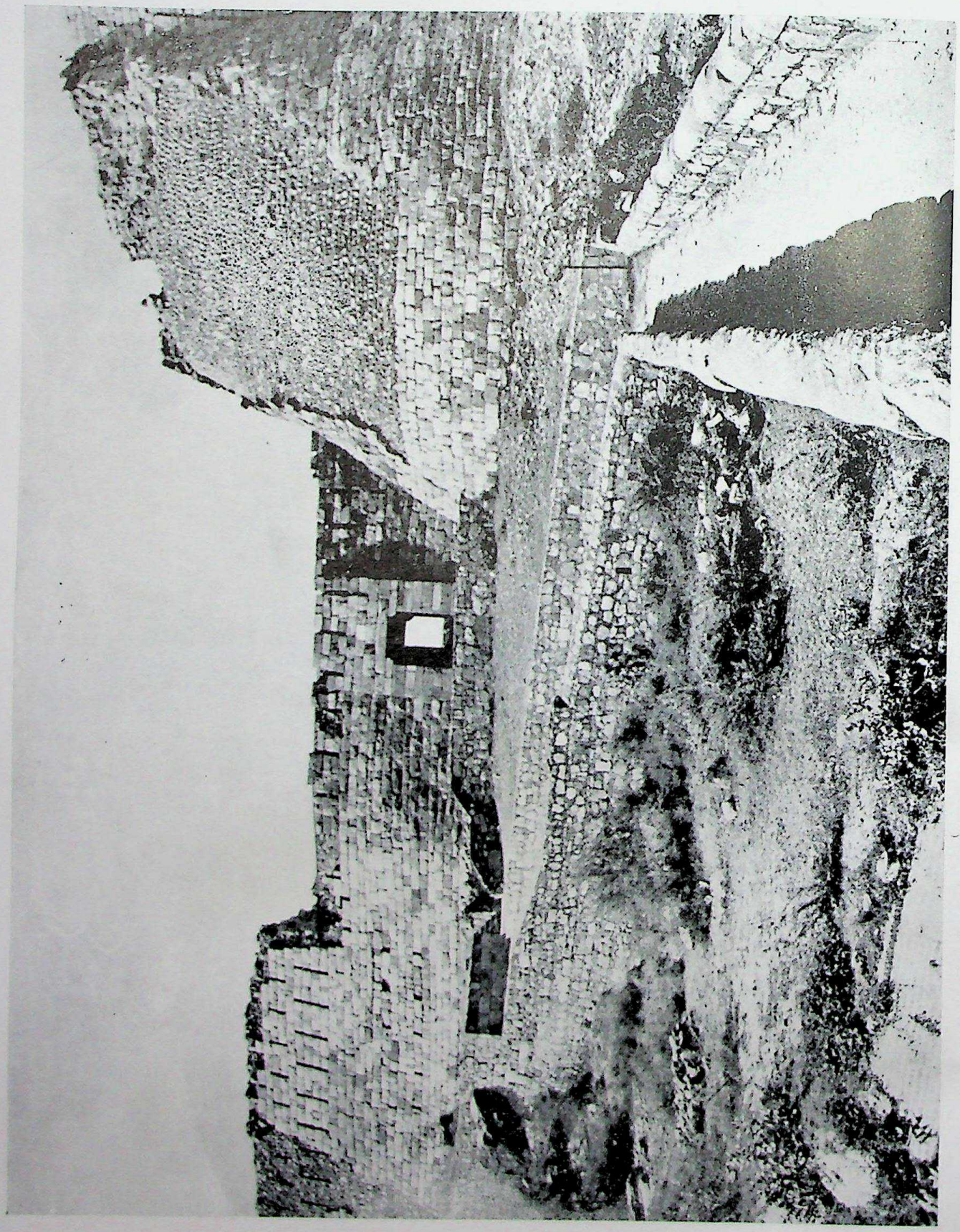
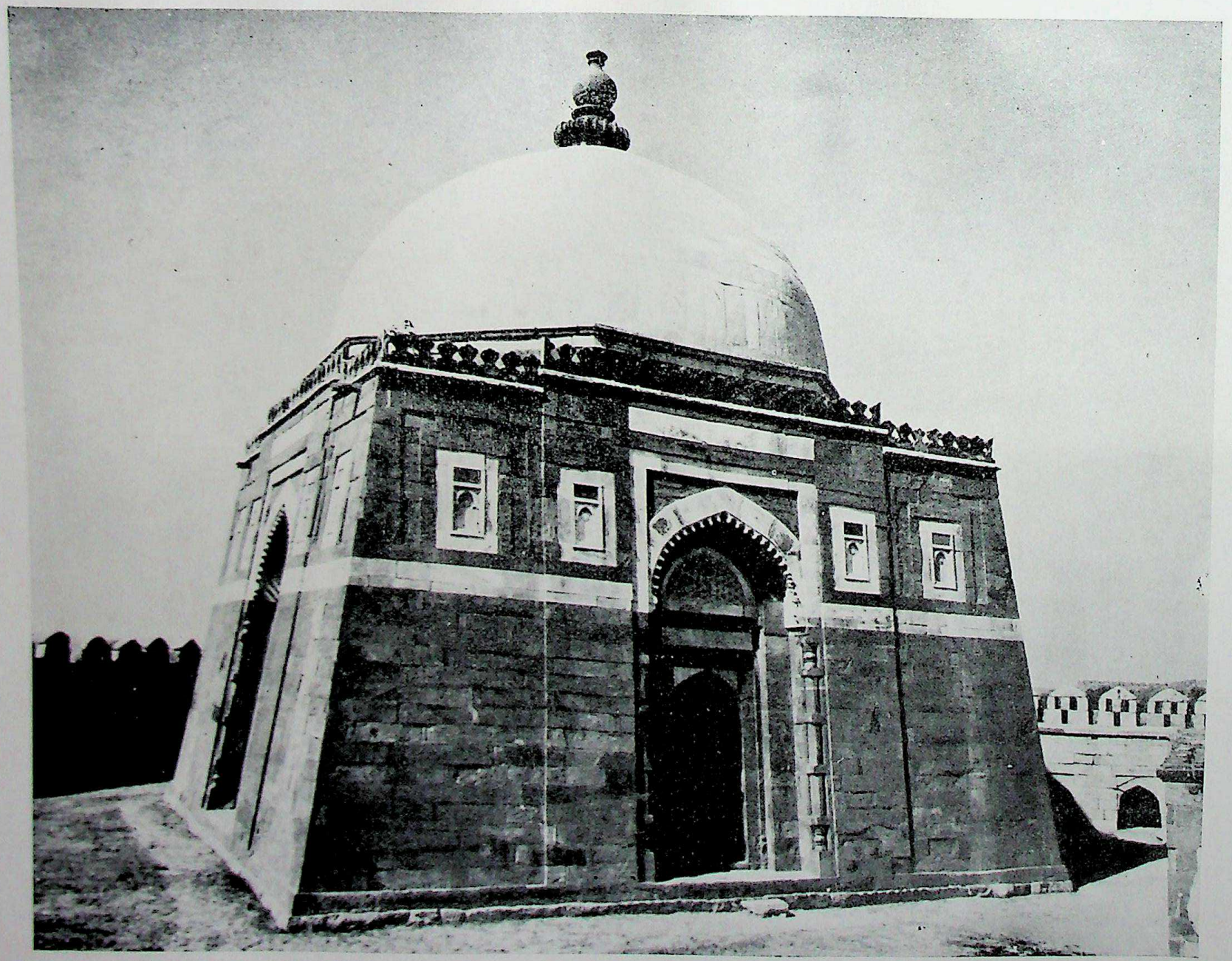


41. Fortification at Tughlaqabad.

42. Ghiayasuddin Tughlaq's mausoleum outside Tughlaqabad.



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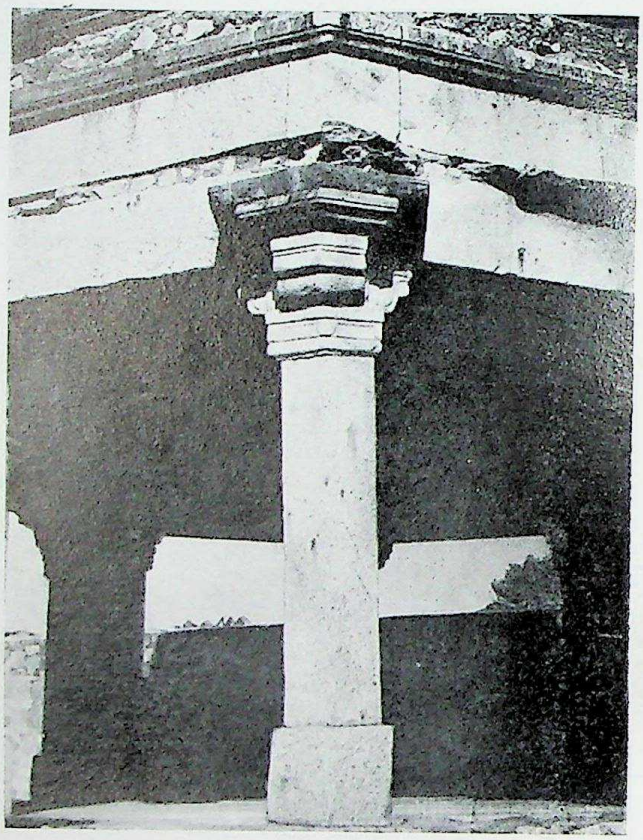
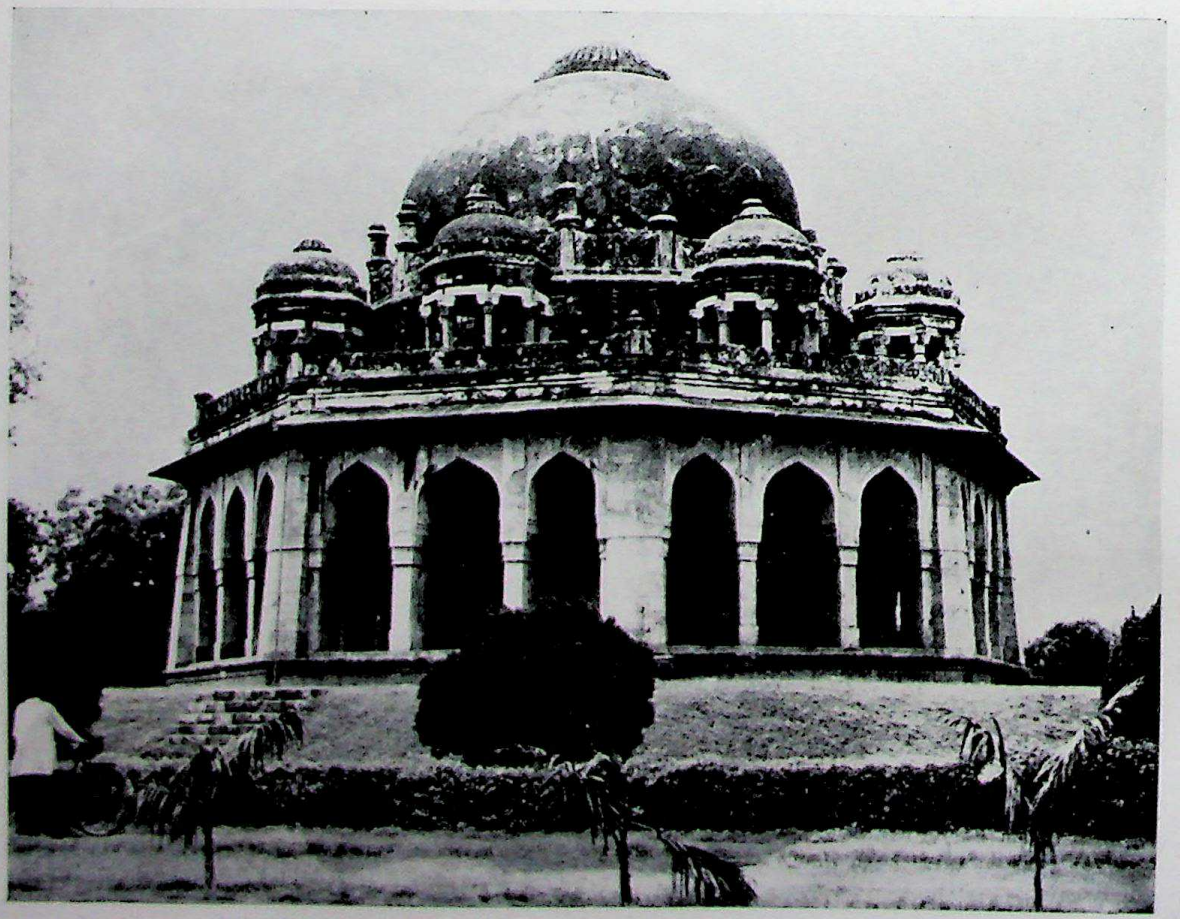
43. Tomb of Iltutmish's grandson, at Mahipalpur showing pentagonal pillar type.

44. Adam Khan's tomb, Mehrauli





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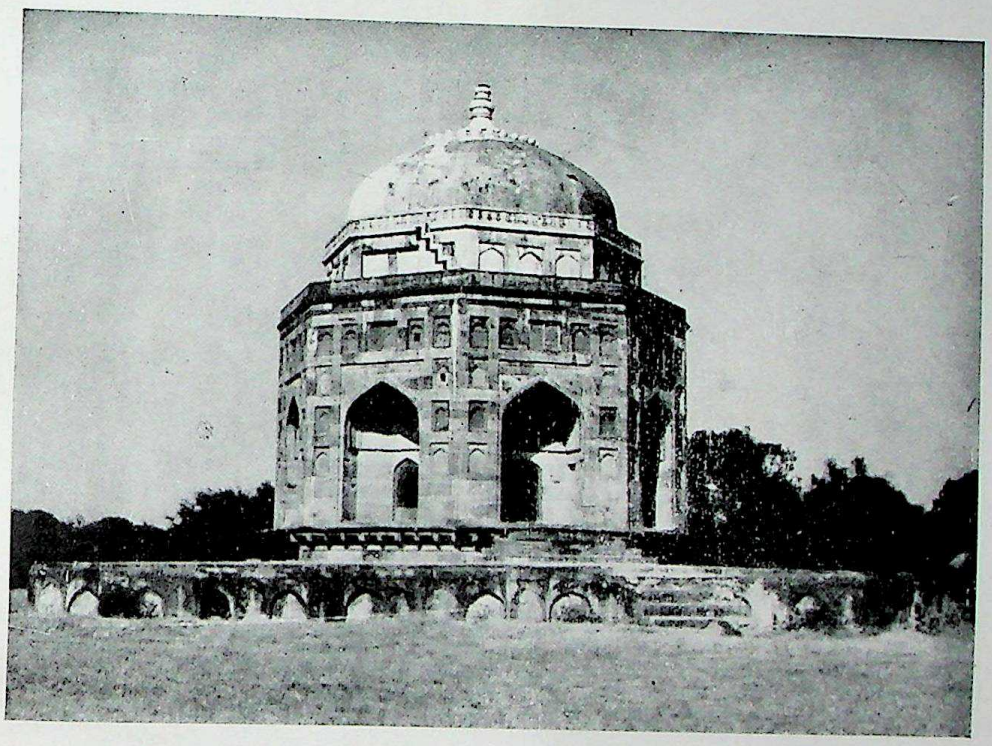
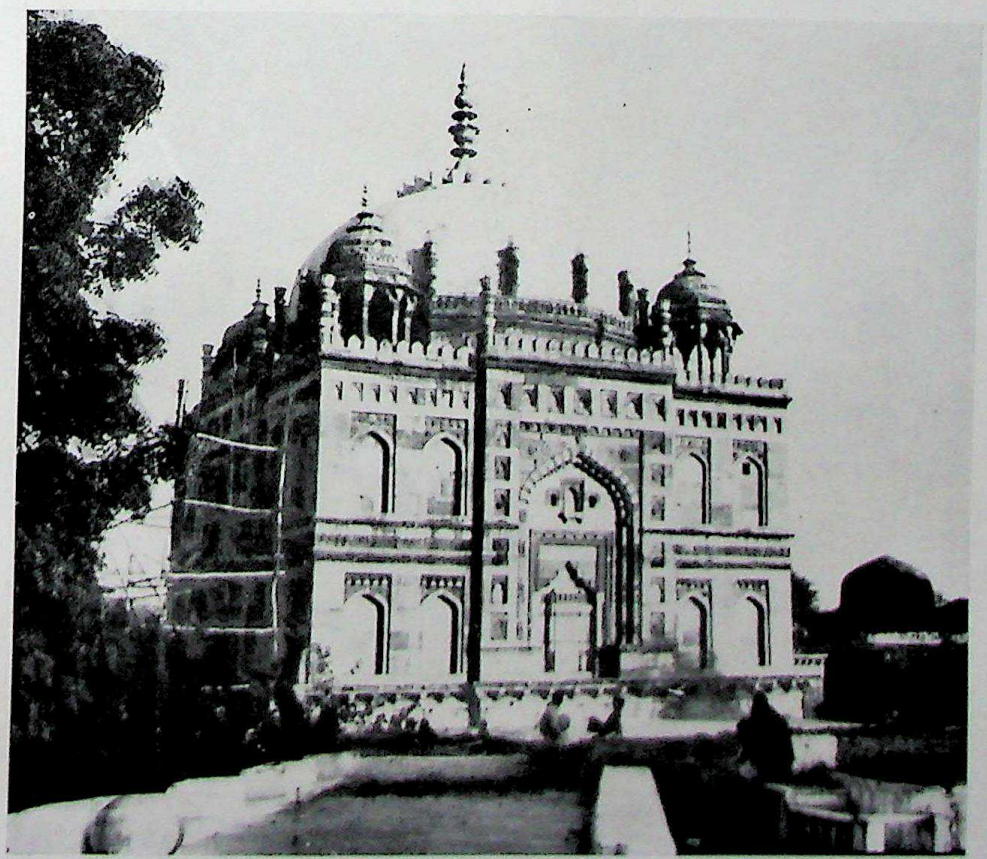
45. Shah Quli Khan's tomb, Narnaul.

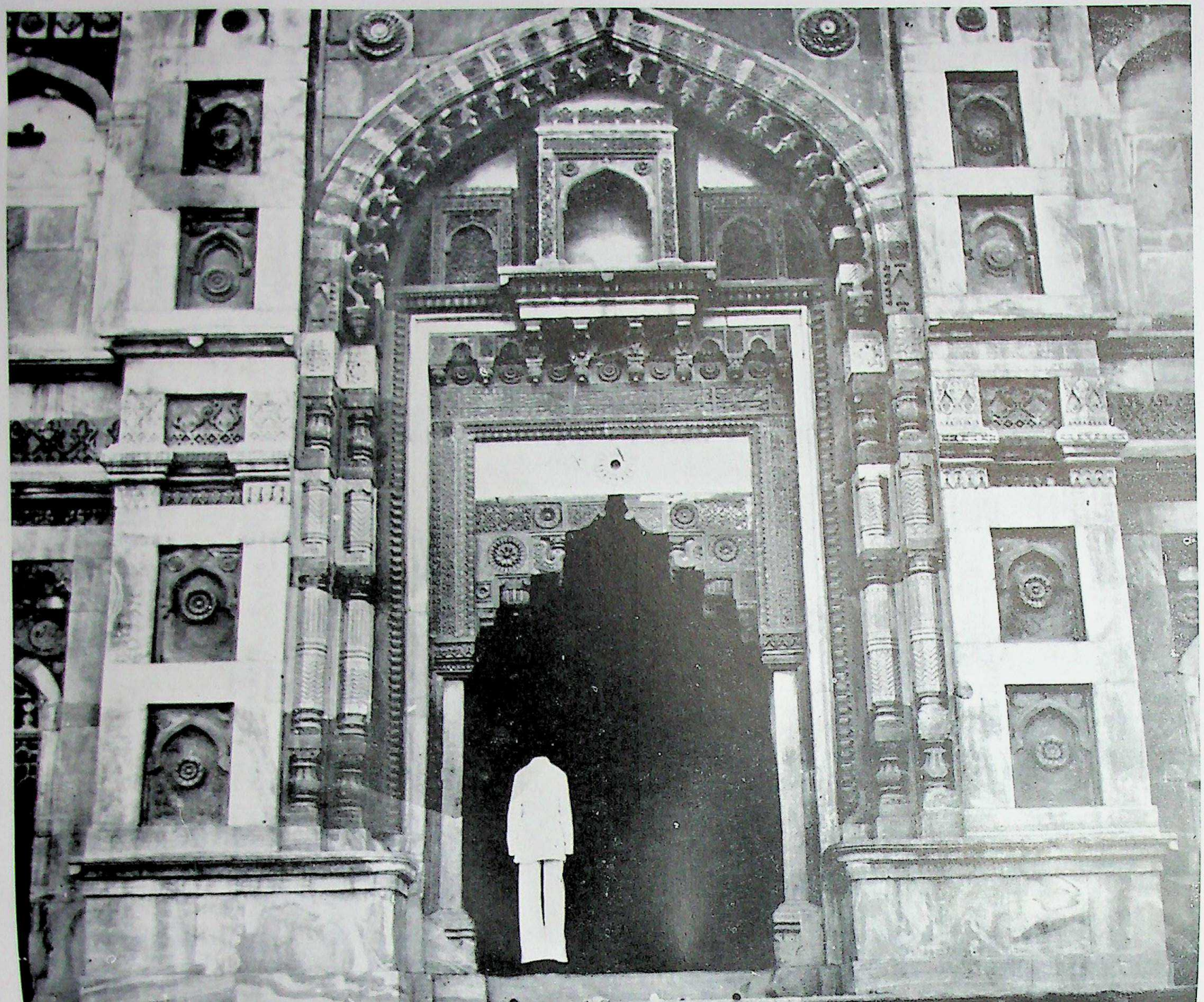
46a. Ibrahim Sur mausoleum, Narnaul.





46b. Ibrahim Sur Mausoleum, facade, Narnaul.

46c. Details of corbels at Ibrahim Sur mausoleum, Narnaul. →



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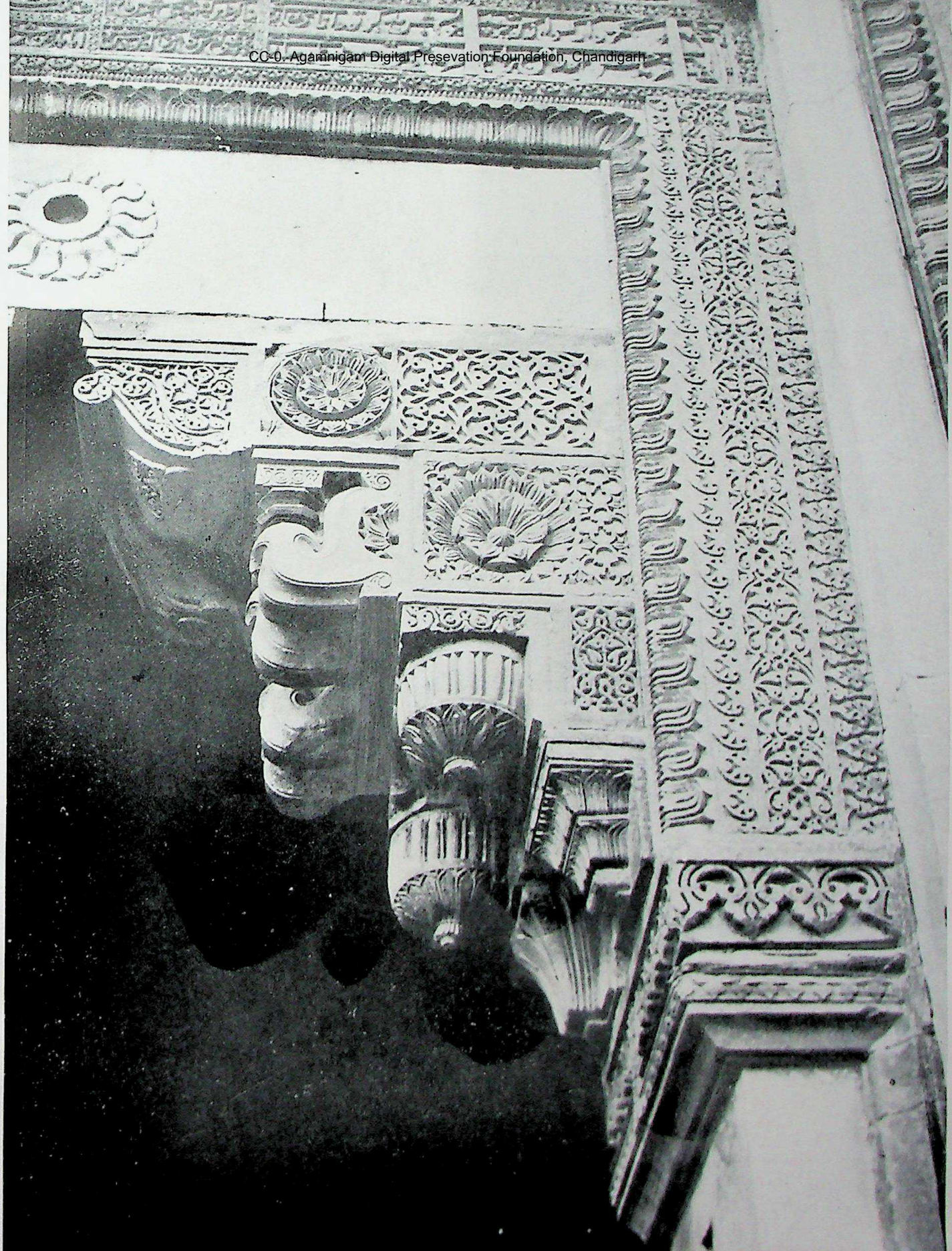

47a. Chatta Rai Balmukund Das, Narnaul, courtyard.

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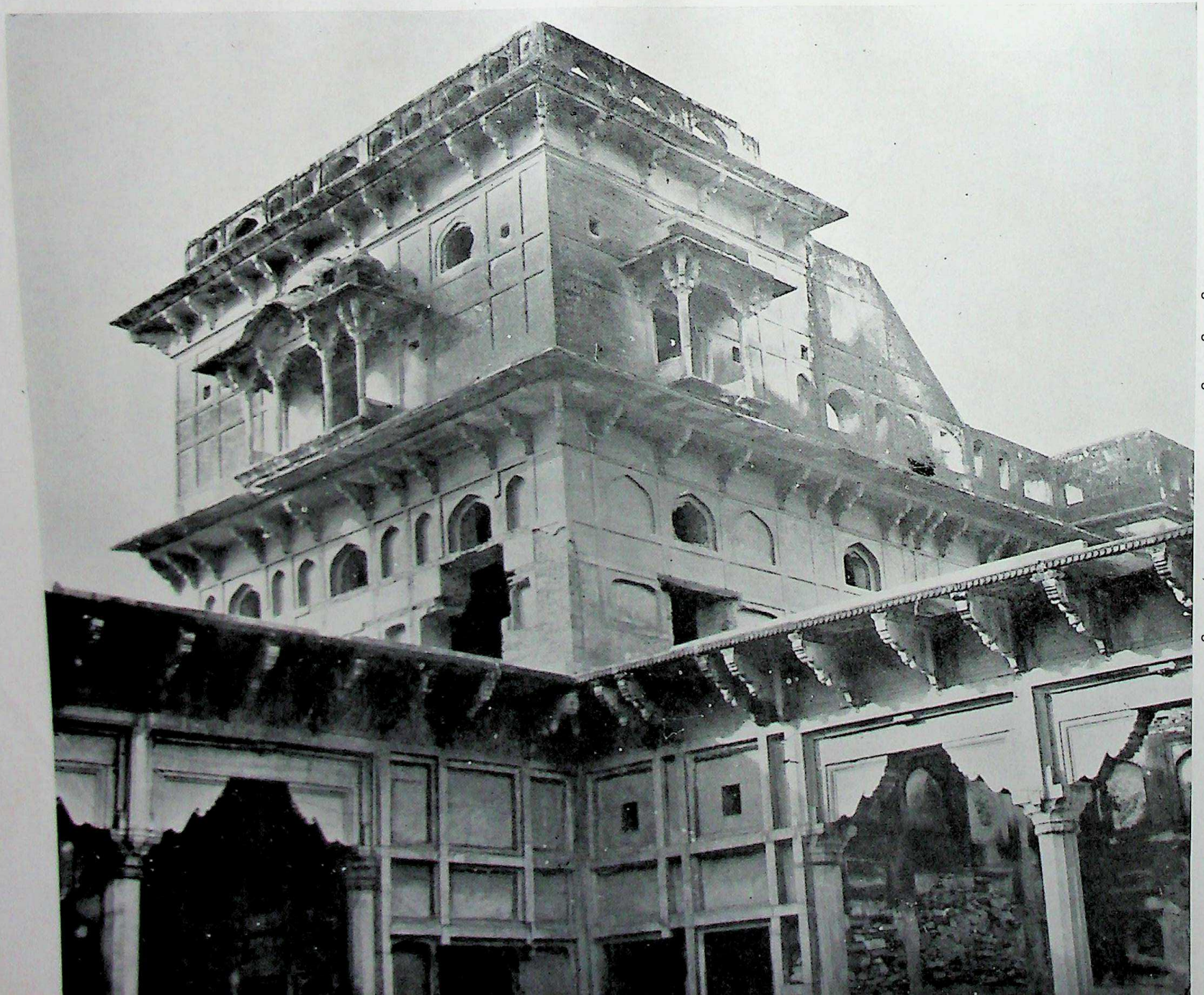
47b. Chatta Rai Balmukund Das, Narnual, upper floors and *jharokhas*.



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47c. Chatta Rai Balmukund Das top *baradari* with 'Bengali arch' dome, Narnaul.

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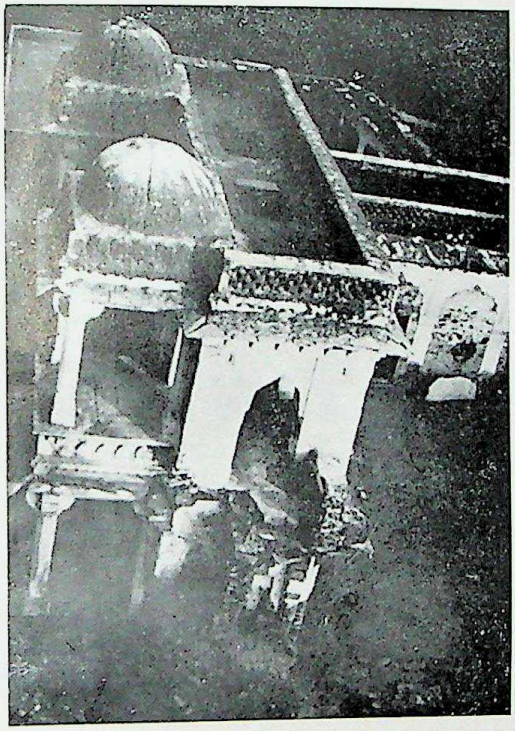

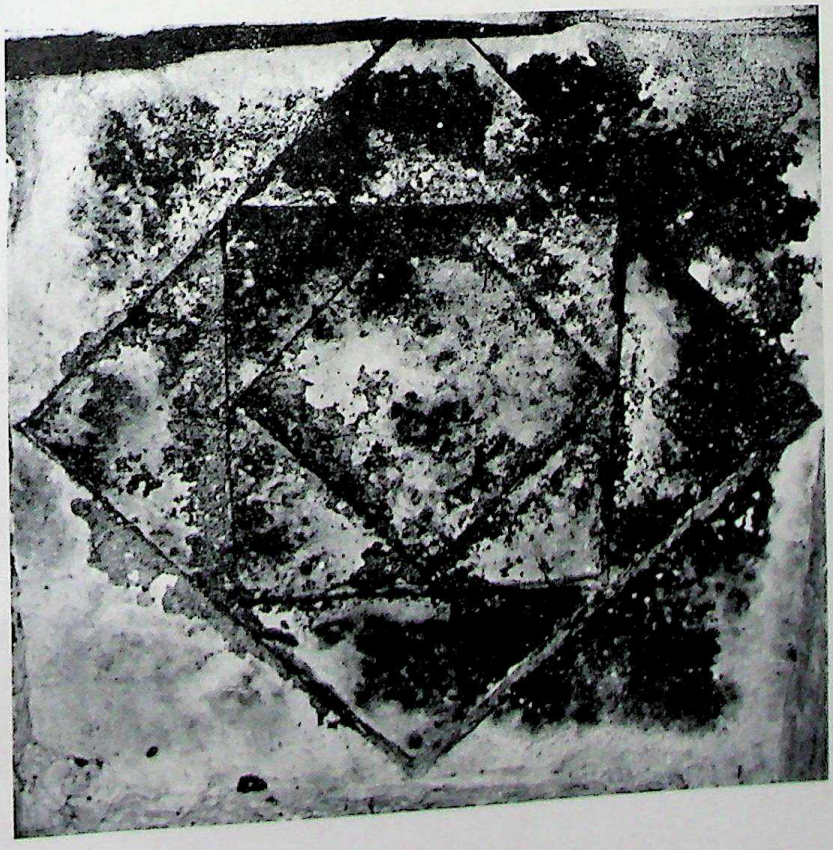

48a. *Dargah* of Pir Turkman or Shah Vilayat, entrance gate, Narnaul.

48b. Exterior flank of *Dargah* of Shah Vilayat.

49. Coffer-type ceiling of flank chamber of Shah Vilayat Dargah, Narnaul.

50. Qila-i-kuhna Masjid, Purana Qila.

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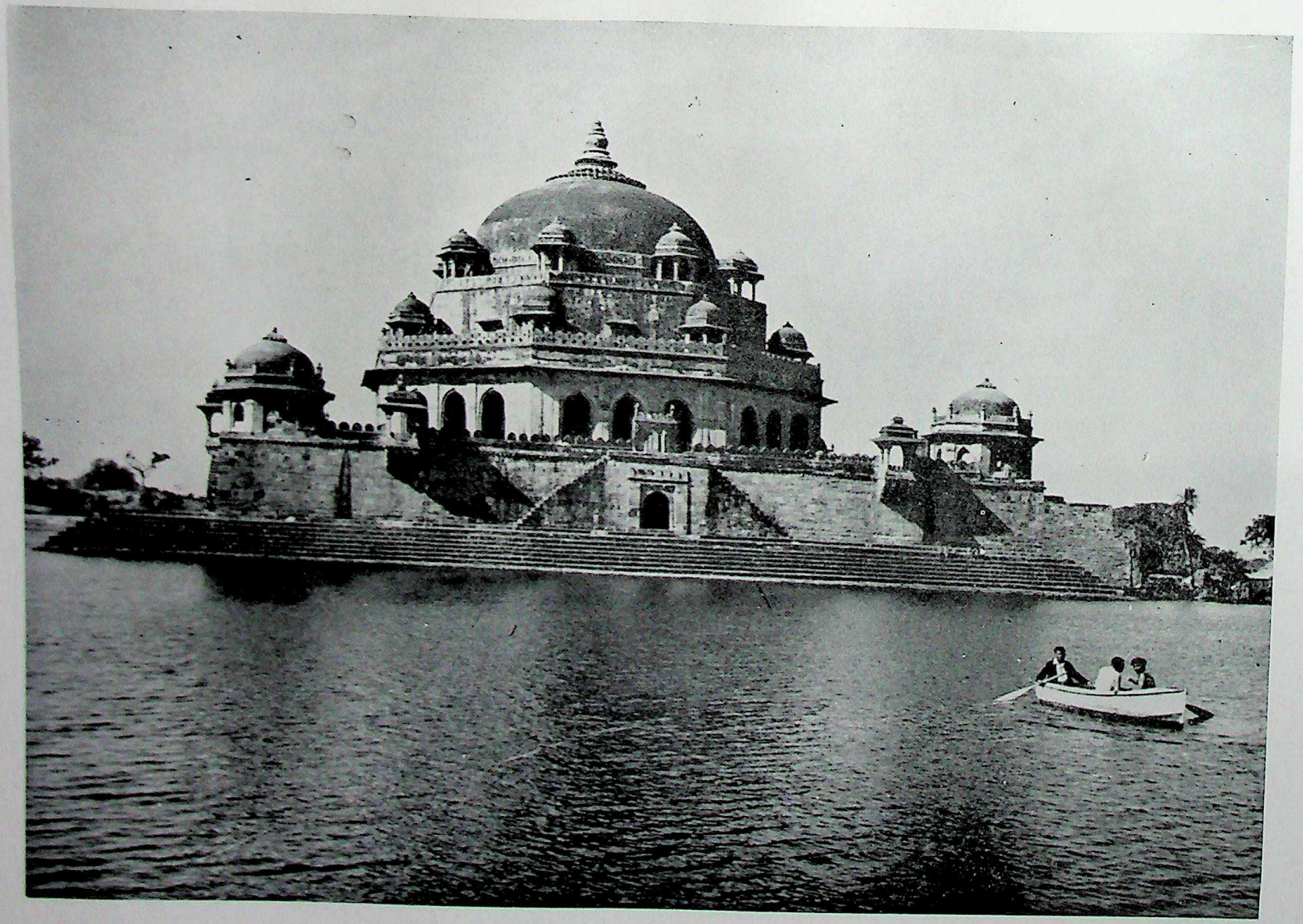
51. Sher Shah Sur Mausoleum, Sassaram.



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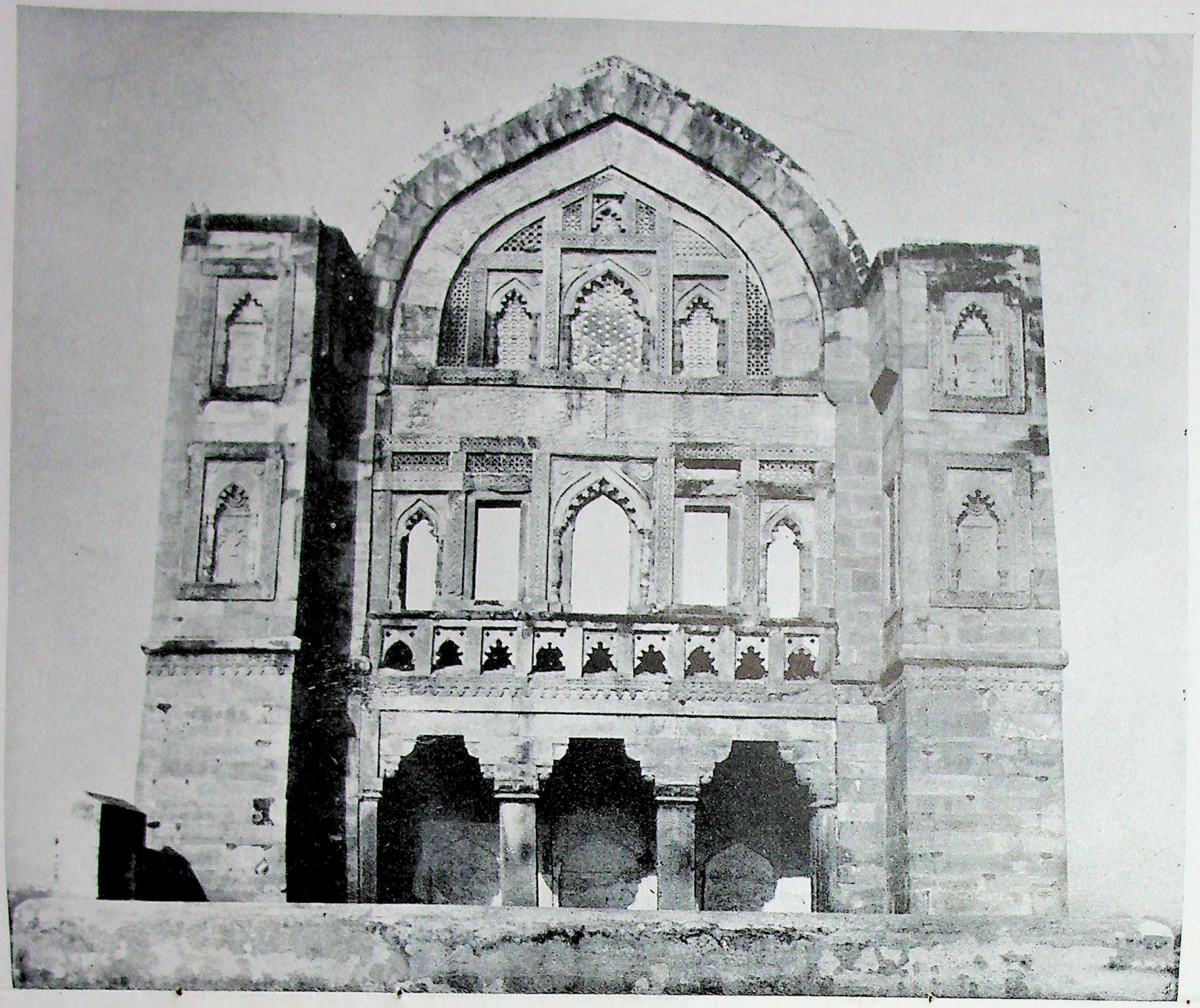
52. Jhanjhri, Jaunpur.
53. Atala Masjid, propylons, Jaunpur. →



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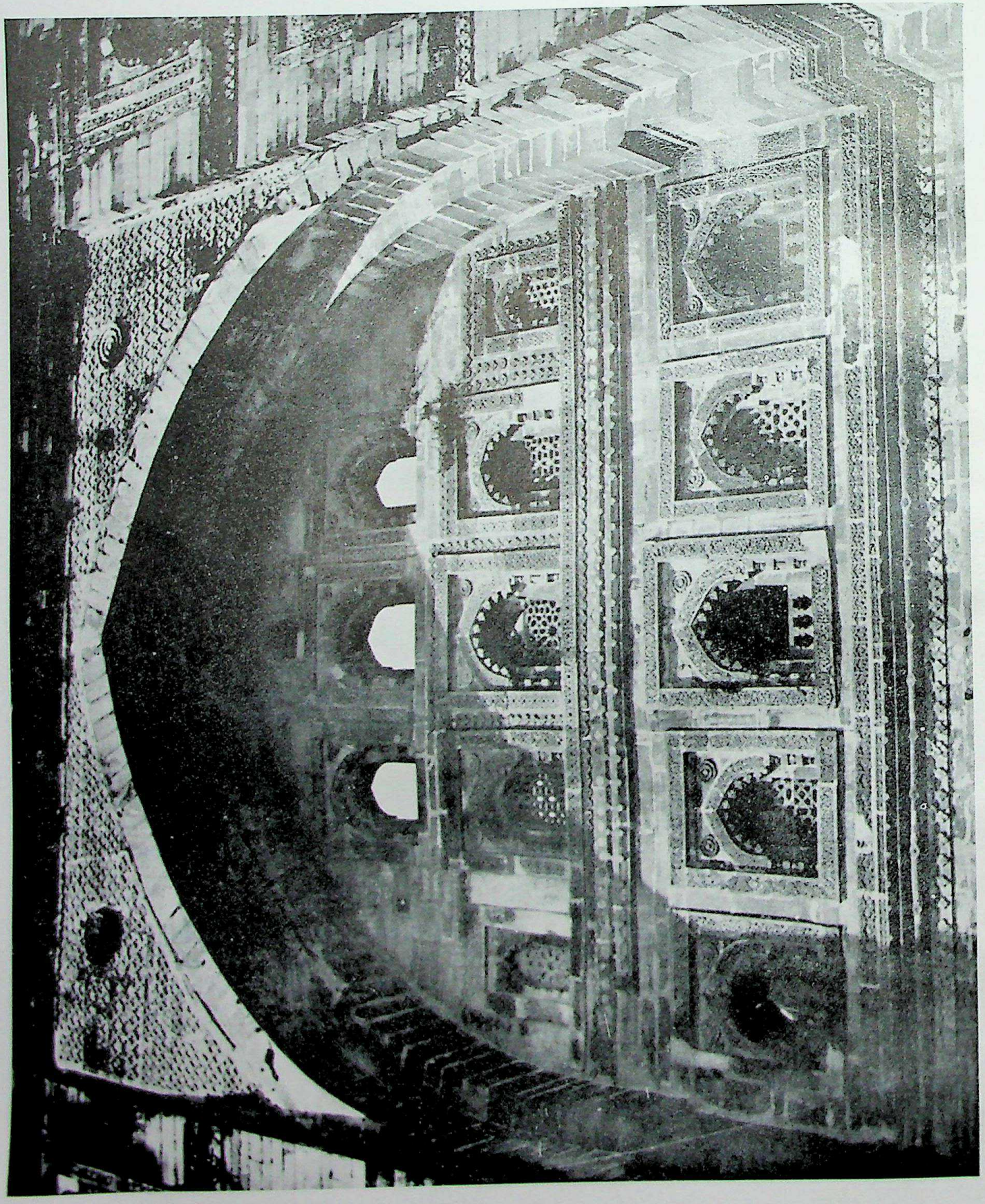

54. Jami Masjid. Jaunpur. Facade details.

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has. It also brings out the difference between the sanctuary with its stilted pillared front and absence of *minar*, side propylons and the cloister units. Its north and south elevations keep a welcome proportionate skyline between the high domed west side and the lower arched eastern porch. Perhaps, the Jami masjid (fig. 46 and Pl. LIV), built in 1478, is the most satisfactory and innovative instance, here, because it further distinguished the central zone of the sanctuary from the peripherial zone by the introduction of the transverse vaulted upper domes for sides on the roof, highlighting the clerestoried elevation and keeping the main facade well-balanced in the process. The fact that it introduced brick construction in a large measure, further indicates that the stone-and-brick tradition of the Islamic architecture has been restored here to some extent.

All the same, in all the three mosques, the uncoordinated manner in which stone carvings or ornamentation and trabeate architecture has been jumbled up with the arcuate domes, leaves the architectural design to take a secondary place over ornamentation. Visual skyline and harmony of parts had not been given their importance, as seen in the Imperial style of Delhi. While, it tends to subvert this Imperial Tughlaq style by its ponderous majesty and elaborateness, it had sacrificed its claim for identity as a regional class and should not thus be eligible to being considered as an aesthetic regional idiom of Islamic architecture. It only shows how, as between Sayyids who were also descended from the Sharqi aristocracy, and the Sharqi Sultans themselves, there was a great hiatus in visual and traditional planning and, in the ultimate analysis, Jaunpur was a digression from an old style, without an ability to evolve a new format. This will be a fair assessment on Jaunpur mosques, notwithstanding their size, ornamentation and elaboration. That some erections seen at Varanasi also, as in the Arhai Kanjur masjid (early 16th century A.D.) rectify the shielding of the main dome by the front pylons (as followed in Jaunpur) and make the mass of the frontage more evenly balanced by the arched openings, including the open pillar side flanks in the upper storey close to the main nave, would only emphasise what the Sharqis themselves failed to achieve at Jaunpur.

Mosques and Tomb Models

The essential character of the mosques of the pre-Mughal stages in Delhi and neighbourhood could be diversified, as briefly indicated below:

1. (a) Closed and battered, with three or four doors. Ghiyazuddin Tughlaq (A.D. 1325). Kabiruddin Aulia or Lal Bangla probably of the time of Mohammad bin Tughluq.

(b) Plainer version with plaster—Firuz's tomb (*c.* A.D. 1388) and the smaller of the Dadi-Poti tombs, Kharera (Sayyid period), the top portion of the Bijaymandal in sandstone of Mohammad Bin Tughluq's time; the gateway structure in front of the Jami Masjid at Hissar Firoza; the Jahaz Mahal and Gujri Mahal at this place. All these are of the same model, ranging between Mohammad and Firuz Shah and not later.

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47. *Kabuli bagh mosque, Panipat.*

2. Shish Gumbad (15th century A.D.)—Square; double storey height; central offset screen arch with turrets on top merlon; square character of offsets; four doors (rest only false windows); corbelled entrance arch supporting a lintel. Tomb of Malik Khizr Khan of the late Sayyid or even Lodhi times in sandstone at Sonepat, an excellant model of the age, in Imperial style.

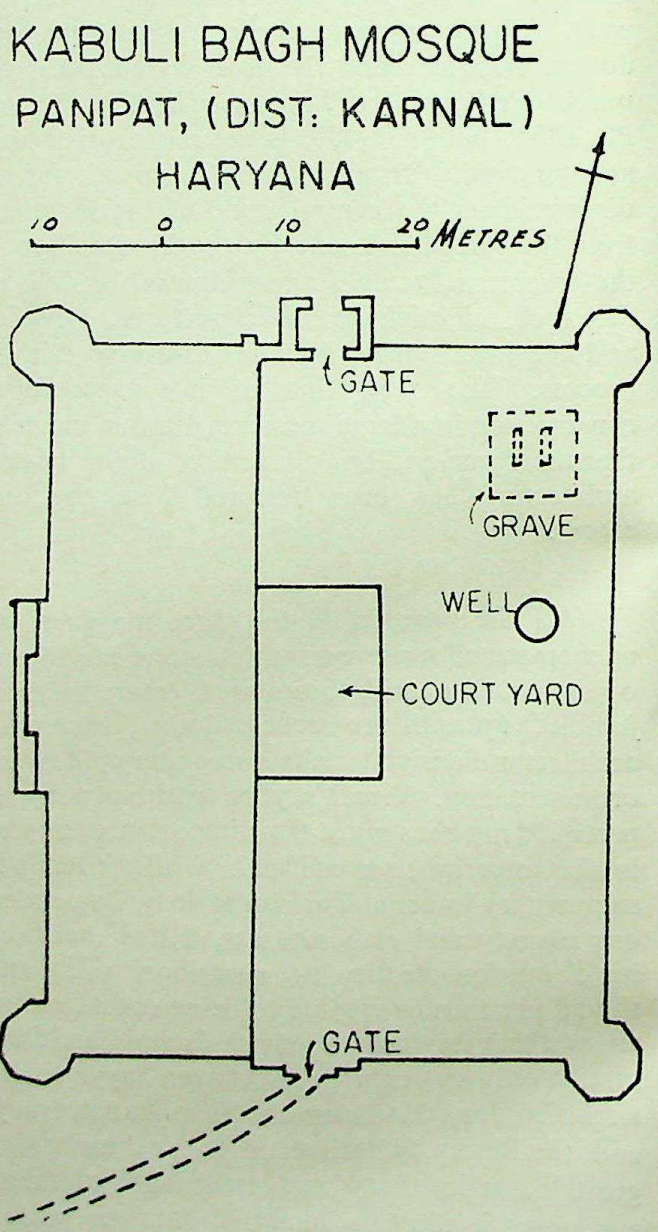
(3) Tomb of Mubarak Shah Sayyid (*c.* A.D. 1434) open, battered octagon, three contiguous arched openings on each face, *chajja* on brackets over the spandrels; eight smaller cupolas, themselves octagonal; open pillared, low plinth.

(4) Tomb of Adham Khan (*c.* A.D. 1561) similar to (3) in ground level openings with *minar* turrets; covered by a pilaster; no *chajja*; upper elevation sixteen-sided, false arches with cardinal projections with turrets.

(5) Tomb of Isa Khan (1547 A.D.) mostly similar to (3) but with pronounced and heavier *chajja* and *minar* turrets on the top of drum, amidst the false *kanguras*; batter, cupolas, etc. similar.

(6) Sassaram-tomb of Hassaṇ Khan Sur (1535-40 A.D.) and Sher Shah Sur (1540 A.D.), both similar and nearer to (3), (4) and (5) above; angular wall screens of ground floor, minaret motif above *chajja*; high circular drum above, supporting octagonally placed *chattries*, massive dome; and

(7) Kabuli Bagh, Panipat (fig. 47) ascribed to Babar with its overwhelming Tughluq-Lodhi traditions, its multiple-domed overcrowded roof and



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even ribbed interior walls and domes now left only in grooves but originally perhaps tiled; its spacious central axial prayer chamber hall which is perhaps a great new redeeming feature outliving its antecedent monotony—its small side chambers near the main *mihrab* which were perhaps open rearwards and if so, the only mosque type in India of this type with cross, passage for the clergy to enter from the rear side of the campus—a feature well-known in West Asia and seen in India and elsewhere only in the early *Idgahs* as at Delhi and Badaun. Its sideward entrance gateway on the northern flank, with its gracious facade design in chaste sandstone, insisting yet on the Lodhi formula, seen in Sonepat (Khizr Khan's tomb), and Delhi.

During late Tughlaq times and followed by Sayyid and Lodhi stages, there was a considerable variegation of the *maqbara* layout, especially where more imaginative planning was, even otherwise, possible than in a mosque. The types erected even included those which have an octagonal layout of basal plinth terrace in which the sixteen-sided structure rises in single storey ending with a parapet and having a vaulted passage leading into the heart of the masonary for a square crypt and with a flight of steps leading to the terrace where, on an octagonal open platform, the grave-replicas are laid open to the sky. The style of the arches and wedging of the junctions of the sixteen-sided ground floor and the principles of vaulting windows are all of the late Sayyid times. This is seen in Kala Gumbad in the Jawaharlal Stadium in Delhi. Correspondingly, another type occurs where, over a square or rectangular ground floor structure, a pavilion on the roof is erected, the rectangle being formed by vaulted projection at one end and pendentive projection of half dome on the opposite side, the Central area being a square. This is seen in the *chattri* monument; also in the Jawaharlal Nehru Stadium premises.

A third type has a simple three door opening, for the tomb, with a wall mosque on one of the walls and high dome with *kanguras* on the top of the ground floor parapet and the top of the drum. The interior carries corner wedged squinch, under telescoped pendentives, and sixteen-sided top of dome, and cut-plaster decorated *intrados* for the ceiling.

The fourth has three walls with identical arch openings closed with *jali* screens originally, and the fourth giving access into the mausoleum, besides providing a stairway to the roof terrace by it side. It has a typical batter, beams across the spring level of arches below the tympanum and also covered with *jali* frame and having a high drum and dome typical of the middle Tughlaq period, perhaps of the time of the close of Firoz Shah's reign. In a sense, it is the succession to Lal Bangla (or Kabiruddin Aulia) though carried out in dressed stone core and plaster, with sparing use of sandstone workmanship. This is found near the church close to the flyover not for from the Jawaharlal Nehru Stadium.

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Environmental Influences

The construction and utilisation aspects of architecturally large and viable creations—whether forts, palaces, mosques and tombs of scenic character—would have surely involved some basic thinking in the selection of suitable spots. Although such environmental angles might have loomed less large than the strategic, in earlier centuries, in a techinical sense, it cannot be gainsaid that selections of the sites have never been done at random from the earliest periods. Even when temples were constructed, we know from the *Agamic* texts as to how soil examination at least had been one of the important pre-occupations preliminary to the creation of a temple. But that is mainly from the foundational aspects and to some extent relatable to possible water bodies or sub-soil water. However, when we deal with medieval Islamic constructions, we may note that even there, apart from the visual structural or scenic aspects, other primary factors had not been wholly lost sight of. The capital city of any kingdom or empire must have to satisfy certain broader potentialities, although often a site of the capital is first selected and then made impregnable by deliberate defence installations or fortifications. We have Delhi (fig. 48), Agra, Jaunpur, Daultabad, Ahmedabad (fig.49) Bijapur, etc., among the medieval Islamic capitals which have seemingly stood well such a basic review. All the same, not only have we got explicit references to some of the disavantageous aspects of some of these cities from the reigning royalty, but also have instances like Fatehpur Sikri (fig. 50) where a whole capital had to be abandoned after it had risen spectacularly with rich and magnificent architectural creations, because of the acute deficiencies of the most indispensable factors of civic prosperity or sustenance. This would lead us to have a legitimacy in our understanding of these capitals. We have elsewhere touched upon some of the positive factors which had informed their selection, such as availability of constructional material. But we do see that as the city grew in dimensions, it was not totally difficult for the patrons to seek out exemplary and visually satisfactory raw meterials from even great distances, as in the case of the Taj for Agra. We may, therefore, do well to categorize the minimum required potential for a medieval capital, so that we may be in a position to assess whether one or all these factors had been adequately met in the actual cases of the medieval times. The most primary among the requirements would certainly have been:

(a) water source, perernial enough to last even during the long sieges in the trying summers of tropical India;

(b) Communications or contact with the important centres or towns with which the political power had time and again to be in touch, either in contention or in cordiality;

(c) Natural defensive advantage, of a whole tract and not just the spot of the city. It is the lack of foresight of this factor that had, in successive centuries, made certain regimes (and by that token, certain capitals) as more prone to quick

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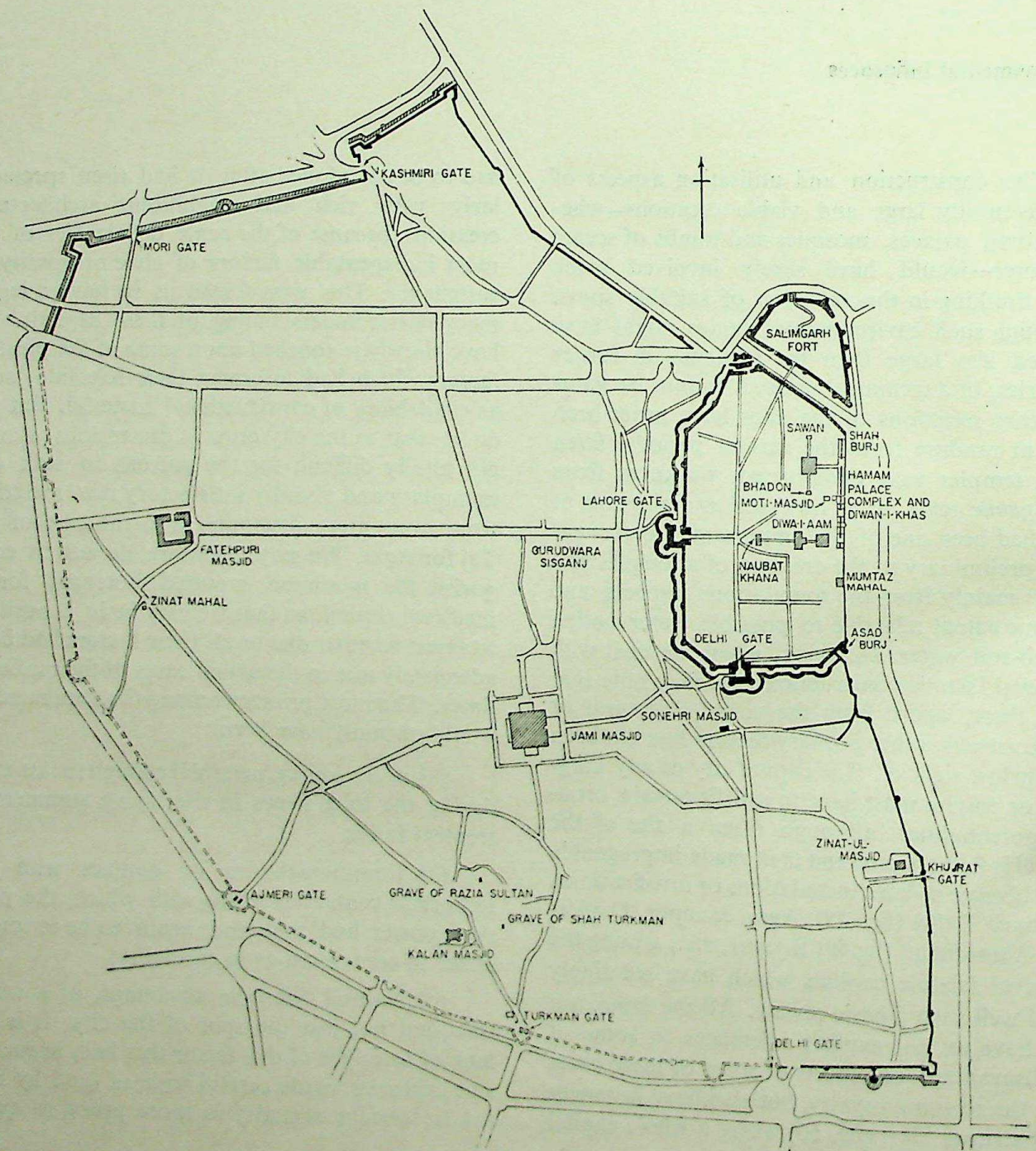
48. ***Shahjehanabad, Mughal Delhi.***



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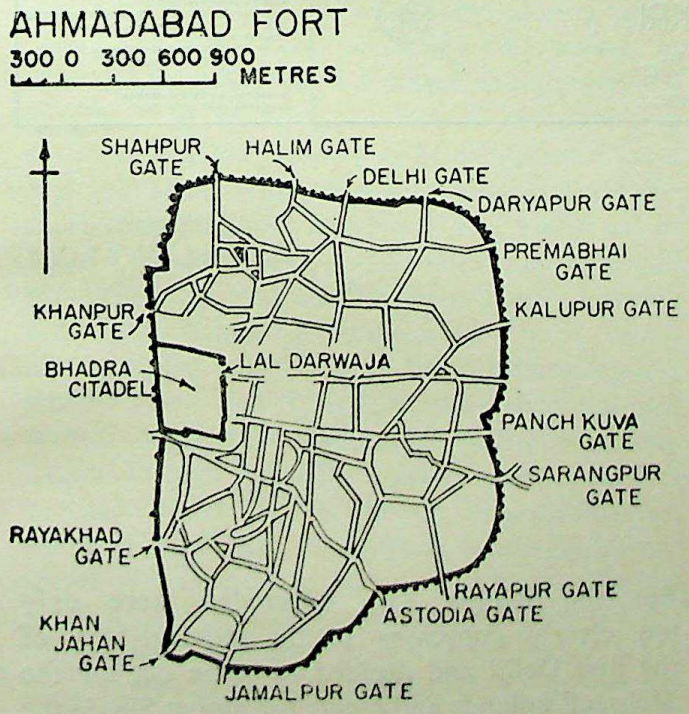
49. *Ahmedabad Fort.*

and lightning-like attack than would have otherwise been feasible.

(d) Trade and transport advantage which by a natural isolation of the capital in a hinterland, where so found would reduce the general level of citizenship also to ill-informed and indefensible communities—a factor in which the royalty had as much stake as the community itself.



(e) Vulnerability from the point of general food production and resources for man and animal, which may reduce some of the capitals and kingdoms to a second rate status in the overall vision of empire building and would thus be a disincentive for expansionism, politically and culturally. In an area where the neighbourhood villages are not prosperous, the repercussion may lead to discontent or dislocations in adequate revenue collection for the exchequer. All these factors, surely, do not have any direct bearing on the architectural school or style—although they do have a bearing on their idiom—through local art reserves or absence of it, but do make the empire or kingdom a foreward looking one which every sovreign at least privately hoped to further. We may deal with these factors by applying them to the Islamic capitals in their own times. Delhi was, at least in an overland sense, as already explained, the gateway to Hindustan of the early medieval times. The most crucial three battles of Panipat fought east of it clearly upheld this chink in it armour. We should consider that for nearly five long centuries, it became the obvious choice of Imperial power of Islam and by the inexorable stroke of history was later also to be the graveyard of the alien imperial colonial power as well. Its position, though historically relevant, has its obvious disadvantages. It kept the capital at shooting range of adventurers, invaders or mercenaries, instead giving the capital a formiddable and entrenched surroundings both locationally and logistically—a tradition which dies hard in India. When the slave Sultanate preferred to occupy Qila Rai Pithora for the first Islamic Delhi itself, its position at the trijunction of the Sind-Rajasthani tracts on either side and with more than a thousand miles of Ganga valley

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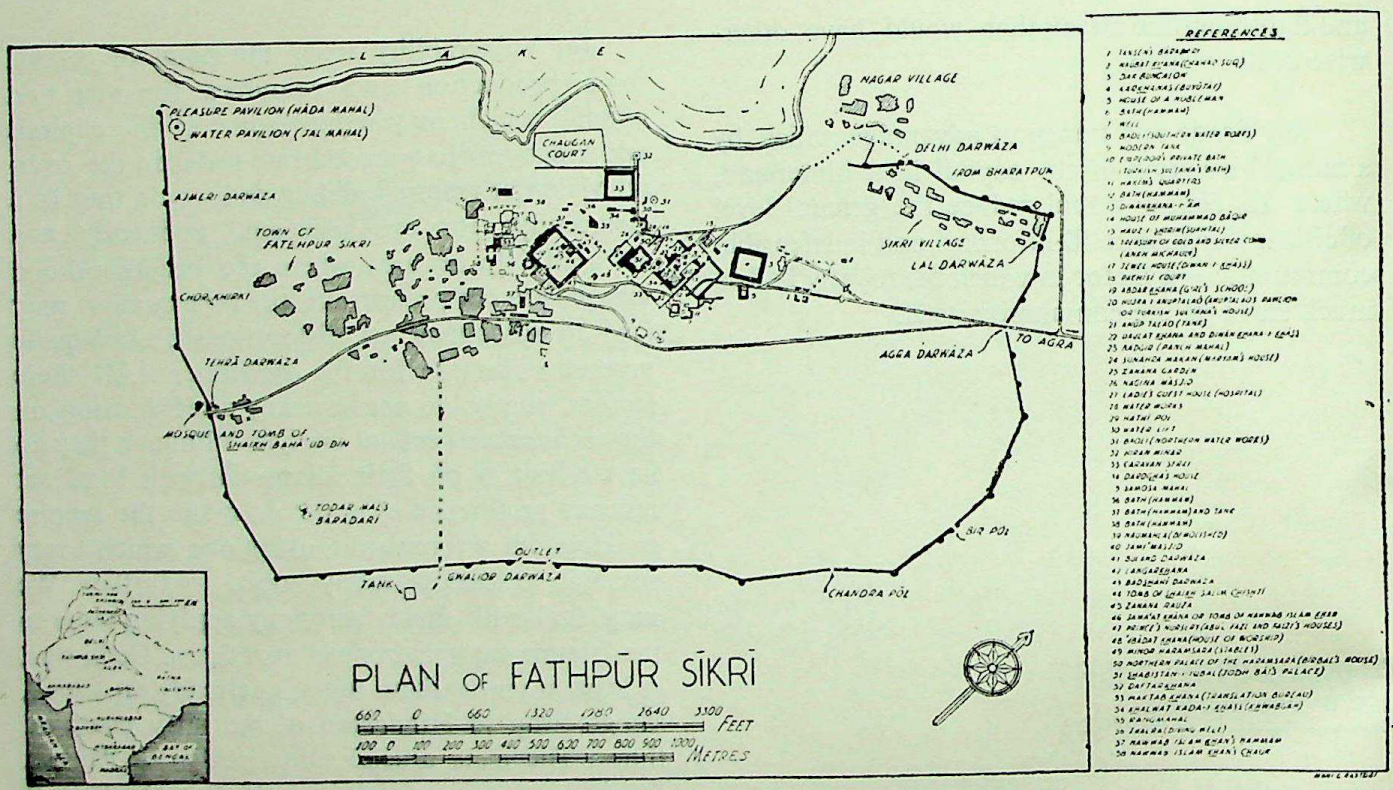
50. *Fatehpur Sikri, Fort.*



stretching towards the east and direct access with central Indian tracts by a beaten track to the south, would have made it an ideal choice to be eyes and ears of Hindustan. But the Khiljis who succeeded were only too clearly conscious of the indefensiblity of the first Delhi and decided to come out of the Mehrauli uplands and locate the city at Siri (in the

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flats round Hauz Khas of their contemporary creation). This was no freak decision. It gave elbow room for fight as well as for survival as their survival even after the disastrous head-on attack of Timur shows. But that attack was itself feasible largely because the Tughlaqs under Ghiayasuddin initially had preferred the hilly Tughlaqabad ravines, rather than the plains. Military security may have decided that then. We would do well to consider that even the second Tughlaq king—of lamentable propensities, despite his intelligence—Mohammad, should have thought it sensible enough that Tughlaqabad was no complete answer to strategy and fortified the flats between Qila Rai Pithora and Siri into his conception of Jehanpanah, desiring indeed to connect all the four Delhis of his times together by a common defensive perimeter, but before he could put it through systematically, entered into a disastrous shift of the capital to Daulatabad, in the central Indian Satpura ranges and crippled the kingdom. In retrospect, he was seemingly trying to rationalise his problem as he visualized it then, and felt Delhi will put political and cultural distance between South and North and would not be helpful for welding the two. While history could not exonerate him on the peremptory, frenzied and harsh manner he implimented it, it cannot also find him guilty of any basic misconception, when we note that the totally entrenched and near central position of Daulatabad and the already extant Yadava defensive establishment there was a viable factor in his favour. Nonetheless, the point at issue here, in so far as Jehan Panah was concerned, is that it was cribbing in imperial expansionist too much and the times were yet for those who live and die by the sword. When Firoz Shah shone on the urban horizon, like an answer to the prayers of a town-planner, he gave more thought to the whole problem and organised a capital city which had lungs to breath by its extensive area and had for the first time a riparian setting. Here was a city, Firozabad, without any outer fortifications, but designed, run and developed by a visionary who had planned for peace and not for war. We have inevitably to skip through the Sayyid line which had no deep anchorage in empire-building, being itself drawn from the secondary Sharqui aristocracy of Jaunpur, but were ostensibly managing to keep the show of running a limited empire, around Delhi from Kotla. The successor Ibrahim Lodhi, relying mainly on his man power and elephants to retain short-lived power, had not reckoned with a planner like Babar, armed with his artillery, used for the first time in India, besides a swift moving cavalry, and paid the penalty for it. But Babar did not himself consider Delhi as more suitable than Agra where he established the Mughal power and was thinking of things other than mere conquest, such as gardens.

Agra

With a riparian setting hardly excelled, Agra could however have been, even in early Mughal days, the bowl of heat and dust that it still continues to be. Babar had a weakness for gardens—which he promptly established on the opposite bank, as Arambagh (now called Ram Bagh gardens). The location of Agra, by that very token, could have been visualized only in the later periods and not in the early

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Islamic times, because the mental disposition of the rulers of Delhi earlier was never in the direction of a pan-Indian culture diffusion, but mainly of political expansion and enriching the coffers by sporadic military expedition and plunder. It was only in Firuz Shah's times that the mid-Gangetic valley, as at Jaunpur was absorbed, for controlling the discrete empire which had spread upto Bengal. But the early expansionist military successes of Qutbuddin Bakhtiyar Khalji (which won these tracts for Delhi power in Bihar and Bengal) had not consolidated it into a harmoniously welded kingdom subsequently, till the Mughals could get rid of the Suri line under Sher Shah. Only nominal overseeing by a royal kinsman was existing. No coordinated understanding with even these kinsmen was always materialising. But Firuz Shah's Jaunpur was a new urbanizing effort and paid dividends by his reign developing well, in terms of civic and religious architecture like canals, bridges. mosques and tombs. Only from Sher Shah Sur's blue print for an empire in the mid-Gangetic valley from Bihar to Delhi that we find, however, the germs of a truly political and administrative thinking, with several far-reaching steps in transport and resource management emerging-which was fully exploited by the Mughals in their own even deeper commitment to a well-knit empire and peace on all fronts. The location of Agra was certainly making the rulers also think more towards central India and other parts of Hindustan. Farm prosperity was now ensured and also adequate availability of the best building material. like sandstones from Tantpur and Chunar. But there was greater complacency and lethargy in the plains than at Delhi.

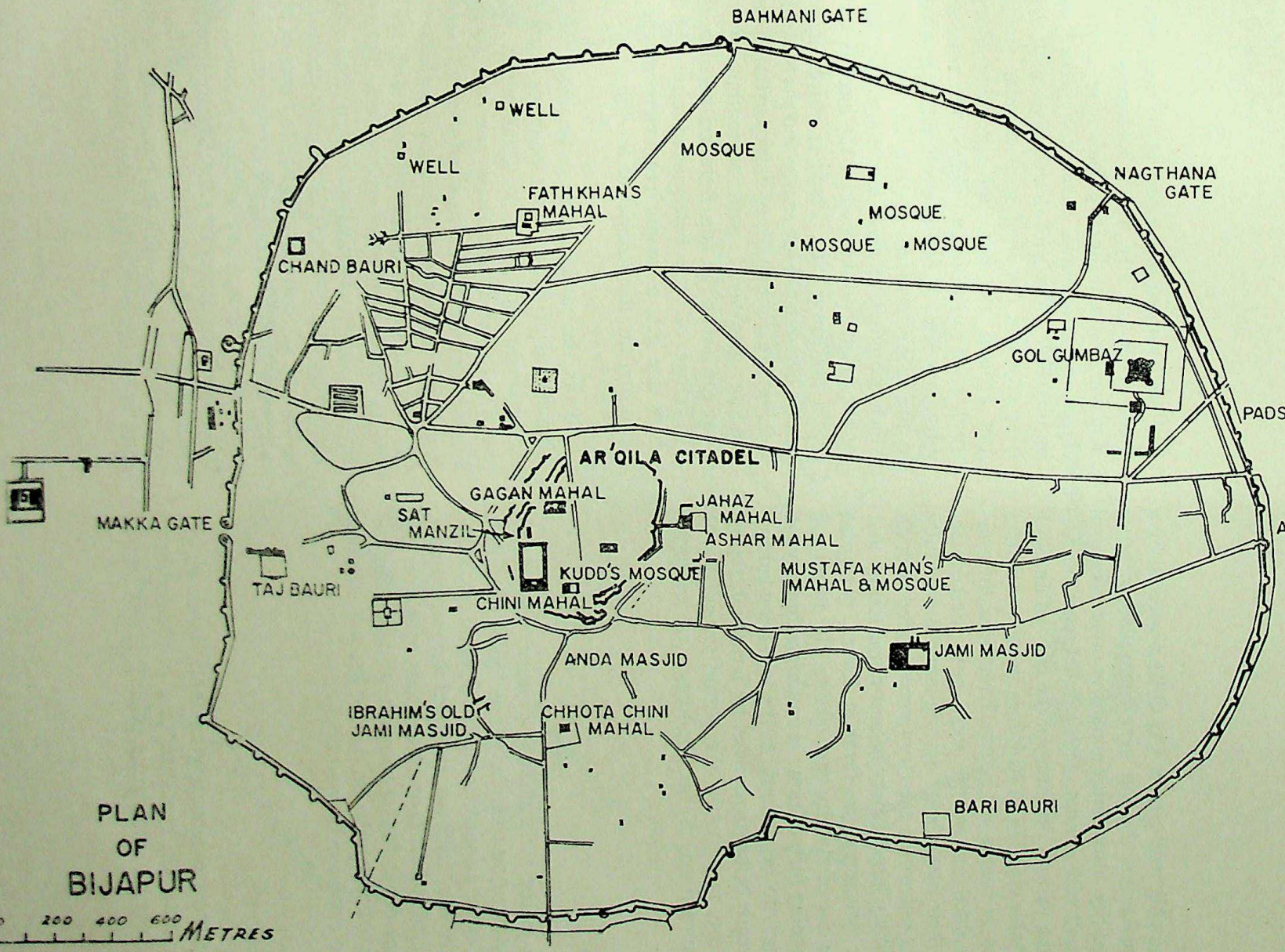
Daulatabad, in the pre-Mughal times, was a constant military target for the central Islamic power, and the rigours of prolonged invasions and depredations were part of the free-booting times of the Sultanate of Delhi and of the Khiljis and of a political *faux pas*, during the early Tughlaq times. At that stage, it would perhaps have been less advantageous to be tied at Daulatabad than to be at Delhi and would have only allowed rising revolts or disruption from various parts of upper India and Panjab, as often happened.

Ahmedabad

Ahmedabad, as a capital of the Gujarat Sultanate, was again, despite having grown out of the old Karnavati of the Vaghelas, not climatically conducive. In fact, Jehangir called it Gardabad to start with and Jahannamabad ultimately, during his enforced stay there at the Kankaria lake, as he could not bear its fitful, dusty and indeed sultry climate. Even during the Gujarat Sultanate, Mahmud Beghara, the second illustrious Sultan, shifted the capital to Champaner, where a whole citadel, outer city walls and several distinguished erections, both military and religious, arose and city planning was also more meaningful. In fact, a hill and plain combination of a city layout, as at Champaner, or what is called a 'Siege-Fort' type, was a typical indigenous inclination.

Bijapur

The most methodical creation of a typical Indian thinking of the citadel, reflecting the heart of the body, namely, the city, was seen best at Bijapur (fig. 51) on the flat plateau land, under the Adilshahi Sultans. Here was indeed the spectacle



51. *Fort and Arqila Bijapur.*

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of a roughly oval citadel (Ar Qila) protected by a perennial moat in the very centre of an outer fortified city, also a more expansive concentric oval shape and with a moat, with parallel segments forming the various divisions of the city within, with respectable creation of buildings in each of besides a series of tombs and ponds. Even here, the erections spilled out of the fort, now, and again, when their magnificent setting could not be fully brought out within the city (already filled with an exceedingly large variety of mosques, tombs and secular structures)—as Ibrahim Rauza, lying just outside one of the city gates shows. But inspite of the planning for position, its environmental layout left much to be desired, as the low-lying subsoil was already being surrounded by farmland, slushy and loose, resulting in the partial subsidence of the foundations of the building, as centuries passed.

Mandu

Mandu, of the Malwa Khilji dynasty, was of the later Bijapur type essentially in internal layout, but in an ideal and romantic hilly setting and entrenched amidst the Vindhyas. It citadel was surrounded by an artificial tank or water body and goes by the name Jahal Mahal complex, virtually encloseued by water originally, but at present devided into two segments by land bridges.

Daultabad

The most outstanding example, however, of the hills and plain type was that of Daulatabad, where a perfect cheesecake conical hill of basalt had been worked into a perfect defence establishment, when the city was at its apogee under the Yadavas first and the Tughlaq's later, and a deep chasm of a natural, sheer cliff served as the impregnable moat with drawbridge, with the outlying city laid out in a semi circular arc at the foot around the hill, but spreading along the trunk road to Ellora and well served with several subsidiary lines of fortification, much needed due to the rising terraced plateau in that direction which would have given a commanding position for the invader to descend on the hapless citizens within the lower city. There is indeed a perfect balance between the lower city and the hill—almost looking like a monolith of carved exterior—with a winding gatewayed path serpentinously rising along the hill to the top Baradari-which was the last refuge of the beleaguered city and from where one gets a magnificent view of the city below and the steep slopes of the hill.

Thus, the partial *Jaladurga* or water fort (like Ahmedabad of Kotla Firuz Shah or Agra Fort) the *giridurga* (hill fort) like Champaner, Mandu and Daultabad; *sthala Durga* (or land fort) like Bijapur with flat plain all around-were all essentially indigenous defensive exercises notwithstanding the new and distinctive installations and artillery devices, besides defensive architectural features of the Islamic art accumulated within their circuit. They were all, however, having the prime defect of the lack of manoeuvrability, in times of crisis, except by sturdy and intrepid strategem or exemplary valour. It is, however, still possible to see this indigenous aspect of a fort layout sometimes contrasted, as reflected in Kotla Firoz Shah, Red Fort and Agra fort, with the placement of Royal apartments close to the outer bastions. It is

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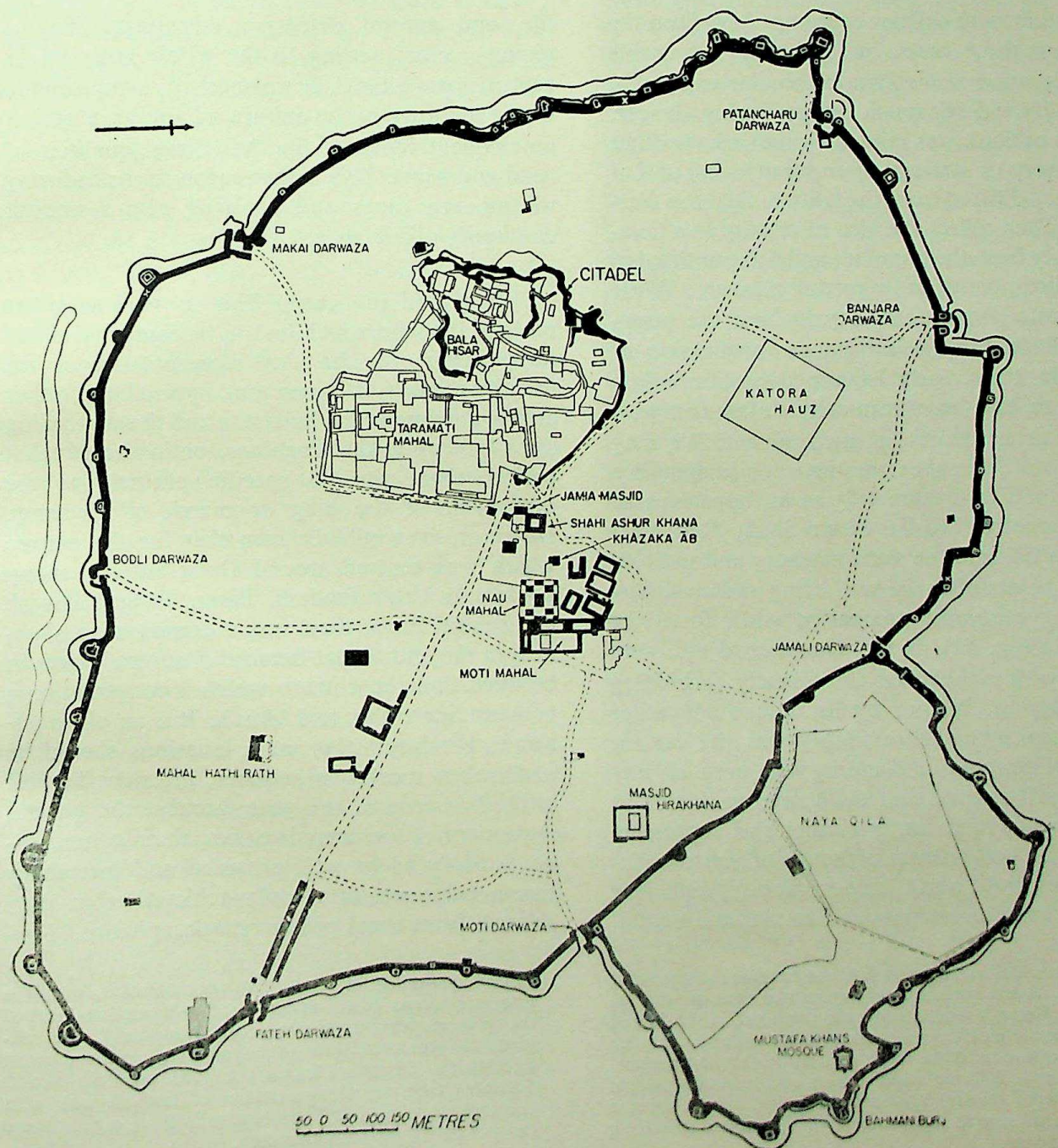
52. *Golkonda, Fort.*



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obvious that mere defence could not have been the criterion in these cases, but rather an admirable vantage location of the area for secular enjoyment and equally well for quick escape during danger. Thus, its outlook was guided by sentiments other than bravery or strategy or endurance and to that extent they diflered from the truly indigenous fort-layouts. They reflect the idea of royalty as a detached entity from the populace and being entitled to undisturbed pursuit of its private pleasure. While the integrated bond of the royalty and the populace is reflected in the indigenous fortification of the Hindu kings, early Islamic dynasties before Firuz Shah, had been ethnically unfamiliar with the secular aesthetics in environment. We may thus see that, for sheer aesthetic or imaginative planning of a fort, essentially as an apparatus of peaceful control, Kotla Firuz Shah, Red Fort and Agra fall into the same category and indicate the high points of social well being and civic harmony and economic prosperity, while forts like Golkonda (fig. 52), Bidar, Daulatabad etc. were created with an eye on the visually forbidding fortress layout. Bijapur by its unique advantage of both serinity and accessibility was the variant version of purposeful planning with even an element of self-assured and deliberate aesthetics as in the Mahals of its inner citadel and represents perhaps the best balance of factors of environmental control, trade and transport facility, sufficient space for easy maintenance of animal and vegetal life, and natural defensive advantage, besides giving perfect setting to the whole zone by its central royal citadel. It was perhaps symptomatic of the maturity of the culture of the area and is an eloquent index of the Adil Shahi qualities of head and heart. This is the reason for its enduring till modern times and showing also a smooth continuity of life style.

In regard to accessibility to various other parts of the land which had to be contacted either for policing over the local representative or for friendly contact, it is seen that, by and large, either during the time of the Sultanate and the succeeding dynasties upto the Tughlaqs, or in the Mughal period, there was no specific obstacle to the movement of the king or march of his army. However, it would be seen that for the empire which was centred around Delhi but had many pockets in Uttar Pradesh, Bihar, Bengal, Panjab and central India, there was a comparative slowness in this movement because of several rivers in between and the climate which is congenial only between September and March. It is an old tradition in Hindustan that mass invasions should be undertaken mostly in summer, after the harvest of the first crop of the year, because the general movement of the army is easier, their commissariat is likely to be well provided and mercenary conscreption was also easily achieved when men are free from usual peasant preoccupations.[1] Fur-

1. We are not dealing here with a magnificent example of a medieval Hindu fortification system like that of Vijayanagara (Hampi) where obviously both native Hindu and Islamic and even European defensive principles and pratice were integrated and the result was a centripetal scheme, with the citadel in the dead centre and with the natural advantage of the hill system co-ordinated to result in the inclusion of several independant villages into a straggling metropolis—a sort of rural-urban agglomeration, with the integrated focus of art and peageantry located in heart of the defence system in the citadel and around and with religious life promoted, through innumerable large and small temples (and bustling bazaars aligned on their front) following their year long calender of festivals and with the swift flowing river Tungabhadra forming a permanent defence on its northern boundary.

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ther, on the one hand, in the enervating summer, resistance to attack is minimum and dissipated, and booty from the harvest maximum when the raid was over prosperous village areas. But in the case of the Islamic armies, it is seen that they did not have any particular season for mounting an invasion, and suddenness and being caught unprepared was more important then adequate organisation of the offensive. Mohammad Ghori's attack on Kanauj, Malik Shah's and Allauddin's attacks on Devagiri and deeper south had this character. At the same time, in deliberate plunder attacks, this was more fruitful for the army, but Sultans could not often move in the same pace, but rather would move at a leisurely pace. (Dwarasamudra, thus, was four months distance from Delhi, according to *Tarikh-i-Firistha*), would have convenient transitory camps, before reaching the distination. They were thus often outwitted by a crafty adversary who short-circuited the lethargically moving royal unit. Ceremony was, further, a part of Islamic way of life, and even when the adversaries meet, on the battle field or personally on a note of discord, *diplomatique* and political ettiquette was fully and elaborately observed with a rather disingenuous decorum. But, it is a significant factor that although the whole of northern and central India, not to mention western India comprising Rajasthan, and Gujarat, were never wholly subdued by the Delhi power, until the Mughal times, (and even thereafter by a condescending autonomy which resulted in the rise of the independent princely states in the late Mughal colonial times all over India) their movement during oppressive incursions was never unduly checked by the indigenous centres located on the way. The contemporary chronicles do not, of course, give any worthwhile detail about the outlook of the indigenous subjects to the periodic and large scale military movements of the Sultans, to arrive at any firm conclusions in this regard. The impact of the religious antipathy shown by the Islamic invaders and rulers had apparently created some degree of terror in the land and there was total apathy on the part of the non-Muslim populations to display any show of either friendship or opposition or emotion. The Turks, the Afghans, the Mughals and the other Islamic groups successively involved in power were alike uncompromising in their antagonism to the Hindu religions and its idealogical positions, and it was deemed an act of faith for them to destroy their institutions. It would seem, however, the Rajput confederacy in Rajasthan, Panjab and Western part of the Ganga velley had become wholly broken down by the Ghori invasions and were psychologically crest-fallen. Thereby the areas concerned became submissive generally in a military sense. The breaking of the proud spirit of the Rajput lineages everywhere by the tirade and attack of the Hindu religion was thus one of the vital factors in the military compaigns of Islamic rulers that achieved the abject submission and obedience of the local population, seemingly in order to avert more ruthless persecution and loss of life and property and especially the modesty of the womenfolk in the process. In this respect, again, we find that only from the time of Firuz Shah, despite his determined opposition to idolatry as elsewhere referred to, the responsibility with which he ruled the kingdom and after him, later, the Mughals, there was a steady resilience created among the indigenous subjects, enabling them to mingle with greater cordiality with the Islamic ruling houses.

Coming back to the period of accession, in the

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discrete pockets, of Islamic chieftaincies, this was one of the reasons which led to the rise of the local ruling houses or aristocracy as in Jaunpur, Bengal, Deccan, Ahmedabad, or Mandu, which saw that the opportunities afforded for them to carve out their own kingdoms, though yet serving Islam primarily, which should be fully exploited and, in this, a desire for independance against Imperial Delhi throne was *also* to become an article of faith among these muslim chieftaincies. In these circumstances, since the reigning Sultans in Delhi specialised in raising of mosques, tombs and other similar buildings to further their prestige, these kingdoms also had to follow suit, and had to erect on a pattern which the local craftsmen were adepts in. This resulted in the difference between the metropolitan Delhi style and some of their regional styles. What more, the civic creation of a capital city was often a routine exercise with these regional powers and did not involve any special architectural innovation, except as at Bijapur or Bidar, sufficiently distant from Delhi in both situation and outlook. In all the other cases, the military propensities were primarily directed only to regulate the revenues of the capital by allowing people of settle and inhabit the various parts of the city and was not following any deliberate attempts to stifle initiative, creating thus progressive trends in civic life and activities. Their maintenance, however, was not yet reflecting an active response to a military preparedness. When settled conditions started prevailing after the invasion of Timur (c. 1400) and with them the establishment of viable kingdoms of the Islamic rule in different parts of India, the civilian character of these fortified towns gradully increased, resulting ultimately in the city walls serving as nothing more than civic security and citizenship, rather than any bulwark against attack. If the attack came from Delhi, the local Muslim rulers themselves defended them and showed a certain proprietory right over the regional security.

The military architecture in India, thus, in the *second* phase of the Islamic period especially in the outlying kingdoms, was non-functional, ornamental (where feasible) and city gates were not factors of external military response, but certain internal fisal regulations, and lost their strategic importance. These forts from the end of the 15th century onwards were nothing more than delimiting boundaries of the important cities and brought the people closer to the reigning king than ever before. They do not serve any useful investigation of their characteristic architectural patterns, as a category of defensive construction. The increase in the number of gates also indicated the general size of the fort and the emphasis on easy movement of the people of various *mohallas* to the neighbouring suburbs. The older fortified cities had a fewer number of gates or often only one gate for regulated entry and exit, whereas the forts of the later period had the largest number of gates, as an index of the peaceful economic and political conditions. Only hill forts of Rajasthan continued to have fewer entry and exit points for the fortified hill-fort area but even there access to the lower, outer town was well regulated. In fact, Rajasthan introduced at this stage another type of hill-fort where the most easily vulnerable part, namely, the access from the lower town to the upper fort was well defended through a series of gateways punctuated on their serpentinous stretch, in order to stall the enemy by pitched battles at each of these gates before further advance into the upper city. Even as late as in the period of Akbar,

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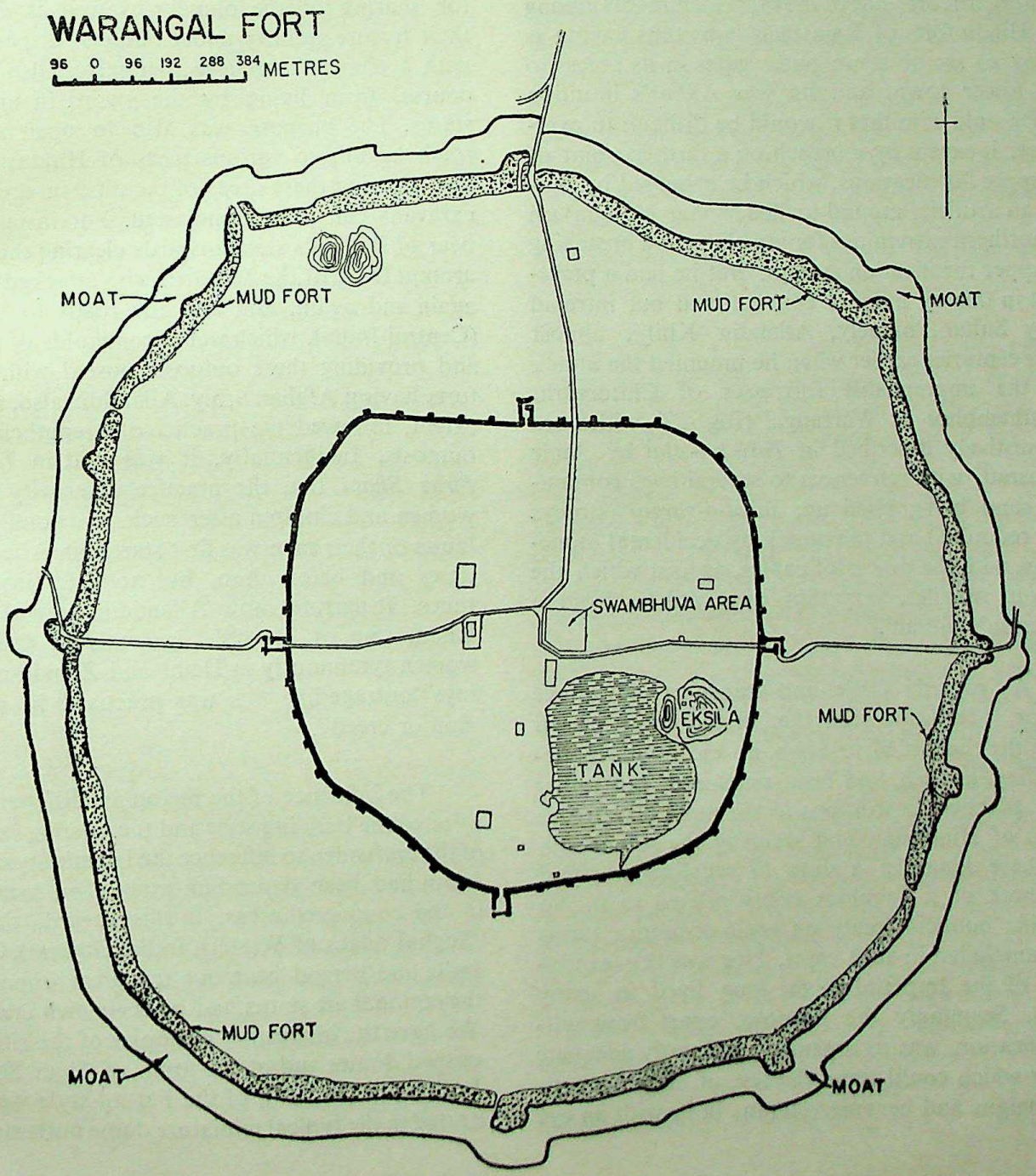
53. *Fort (outer and inner) at Warangal.*



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Chitorgarh fort—one of the most formidable among the Hindu forts of Rajasthan—was thus having as many as six or seven outer gates in its access to the lower town, and its was Akbar's intuition which told him that it would be difficult to overpower it except by a breach on a farther point of its upper fortifications, which he arranged by raising an artificial mound (called Mohar Mangni) on its northern extremities for attacking and breaching of upper fortification system. But he had a precedent in this by a more conventional but intrepid early Sultan, namely, Allaudin Khilji, almost three centuries earlier when he mounted the attack on the impregnable fortresses of Chitorgarh, Ranthambhor or Warrangal (Fig. 53), which are exhaustively described in *Tarikh-i-Alai* by Amir Khusrau, with references to several bags containing sand being piled up, *sabat-o-gargaj* (storeys and redoubts) and the attack by occidental stone-slings with the power of cables, against which the Hindu missiles, very thin, appeared 'as from a brahmin's thread'.

As regards trade and transport advantage factor, it could be seen that in the entire period upto the time of Firuz Shah, no clear-cut empire-building, as such, had been witnessed, but rather well planned expeditions to the more prosperous cities of Hindustan and securing the submission of these kings in a show of religious war and prospect of a fabulous booty related to it. No specific political treaty on socio-economic terms are concluded in such cases. Nor was this exhibition of the Imperial might long lived in many cases. Seemingly the purpose, apart from self-glorification, was to organise a militarily adequate army which could stand the test of such arduous compaigns and become veterans in it, with an eye for sharing of the plunder as well as *fiefs*, for their furture security under Sultans' dispensation, with a chance to relieve themselves also in due course, from living by the sword in uncertain status. The purpose was also to open out the roads leading to various parts of Hindustan and also clearing these areas of bandits, in order that caravans can pass unmolested. For instance, we hear of Balban's steps towards clearing the jungle around Delhi of the Miwattis who attacked the city again and again, and also the roads to Bhojpur (Central India), which were strongholds of robbers and providing these outposts posted with strong forts having Afghan army. Allauddin also, to some extent, followed the practice of strengthening the outposts, Incidentially, it was said in *Tarikh-i-Firuz Shahi* that the practice of cruelty against women and children after such invasions for the faults of their men was first started in Allauddin's times and before him, but not later in Firuz's times. It narrates how Allauddin allowed Nasrat Khan, one of his chief generals to dishonour women tyrannously in Delhi and Ziauddin Barni says "outrage like this was practised in no religion or creed".

The influence of the region in different ways affected the building style and the existing expertise of the craftsmen to influence the Islamic style. Early Islam had been depending mainly on local craft in the conquered areas. In this regard, the pre-Mughal reigns of Western India (Gujarat), Central India and Bengal bear out the great impact that the regional art status had on their own creations. We have the interesting examples of the ribbed or cusped domes and of the tomb of Shah Shuja at Burhanpur (Pl. LV), of the Faruqi style well delineated in the typical miniature dome units studding

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around the ribbed or fluted central dome, and the additional garland-like joint-ribbing that starts from the dome and comes down to the base and contains in the wall facets pilaster supports that proclaim the obligations of the craftsmen to the regional *Bhumija* style of the Northern *Rekha Nagara* of the Malwa temples, the plethora of which (upto the 14th-15th century A.D. even) should have clearly given the idea for this innovation. While the dome is thus intended for Islamic monuments and becomes innovative, it is not original and is basically imitative. It is, however, toned by the fact that this variety is a part of the cultural heritage of the area and will be fully accepted by the builders as well as the generality of people. Its total subservience to the original in this case is continued even in the outline of the brief plinth and even the wide terrace (sur-base) around it. Thus, it is a full and unabashed integration of a broader idea rooted in the region with the Islamic requirements, and made sedate by the inornate walls and the typical row of massive domes and miniature units of the characteristic Islamic mode already practiced here, as in the Bibi-ka-Masjid (Pl. LVI) and the tomb of Shah Nawaz Khan and forming a special motif, within the Islamic sub-style of the tract. On the other hand, the Ahukhana at Burhanpur (Pl. LVII) which unsuccessfully tried to integrate the ribbed domes with a vaulted central bay, but retained the tall slender *minars* in the corner, created somewhat discordant model, although it is in tune basically with the mosque type continued even later during Aurangazeb's time, as at Elichpur, and at Aurangabad (similar to this in it general external appearance). The original for this is found also in Narnaul already during Shahjehan's times. We have already mentioned another temple mode, as in the Somesvara temple at Nadol (Rajasthan) which became a model for the corresponding mosque pattern at Bari Khattu (also in Rajasthan) and was seemingly adopted at Delhi in the famous Sultan Ghari of the time of Iltutmish—all more or less coeval in time (13th century). This shows the inevitable environmental mutual absorption of local or regional idiom in constructional layout, between Hinduism and Islam, in this transitional phase.

A few words would be relevant at this stage of some sub-styles which represent overlap or breaks in the contemporary architectural traditions. We have, for example, the Khandesh area which is an amorphous mixture of so many different vogues from Malwa, Gujarat and lower Deccan in the periods of the Imperial Delhi style. The monuments at Thalner and Burhanpur of the Faruqi line represent one part and those in Akola district like the fort at Narnala and Gavil of the Imadshahi kings represent the variants. They reflect several individual trends clubbed together. The normal storeyed square structures with a heavy dome above, as in the royal tombs at Thalner were evidently influenced by the Malwa style at Mandu, but one of these structures with an octagonal lower part (where dome is now missing) is however an elegant combination of workmanship varying from the Late Tughlaq in the 'dagger-type' edges of the arched opening, in the door frames or in the inset miniature *jali* decorations of the walls or the tiny minarets, characteristic of Bijapur monuments, the very octagonal shape of the plan being basically indebted to Mughal forms, with the corbel-formulations in characteristic serpentinous harp or bow type (Pl. LVIII) being abject copies of Salim Chisti dargah at Fatehpur Sikri or of the Jehangiri

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Mahal of Agra, the surface ornamentation also being truly Mughal. There are even parallels to the falasc double-storey type square tombs from as far field, as at Hampi, where the cluster of mausolea at Kadirampur, a little separated from the outer fortification of Hampi to its south, is after the coevel Lodhi preferences in Delhi. Added to this, the Bibi-ka-Masjid at Burhanpur, datable perhaps to the last quarter of the 16th century A.D. is such an astonishing parallel of the Ahmed Shahi monuments of Gujarat that one may not attribute it to any resident local guild of artisans at this place. The Gavil and Narnala structures of the 15th-16th century A.D., however, appear to have received their impulses as much from the Khandesh itself (as in the ornate corbels below the main upper beam of the arch) as from other truly pre-Mughal examples copied elsewhere upto Jammu and Kashmir in the Mughal and Sur monuments.

55. Tomb of Shah Shuja, Burhanpur.

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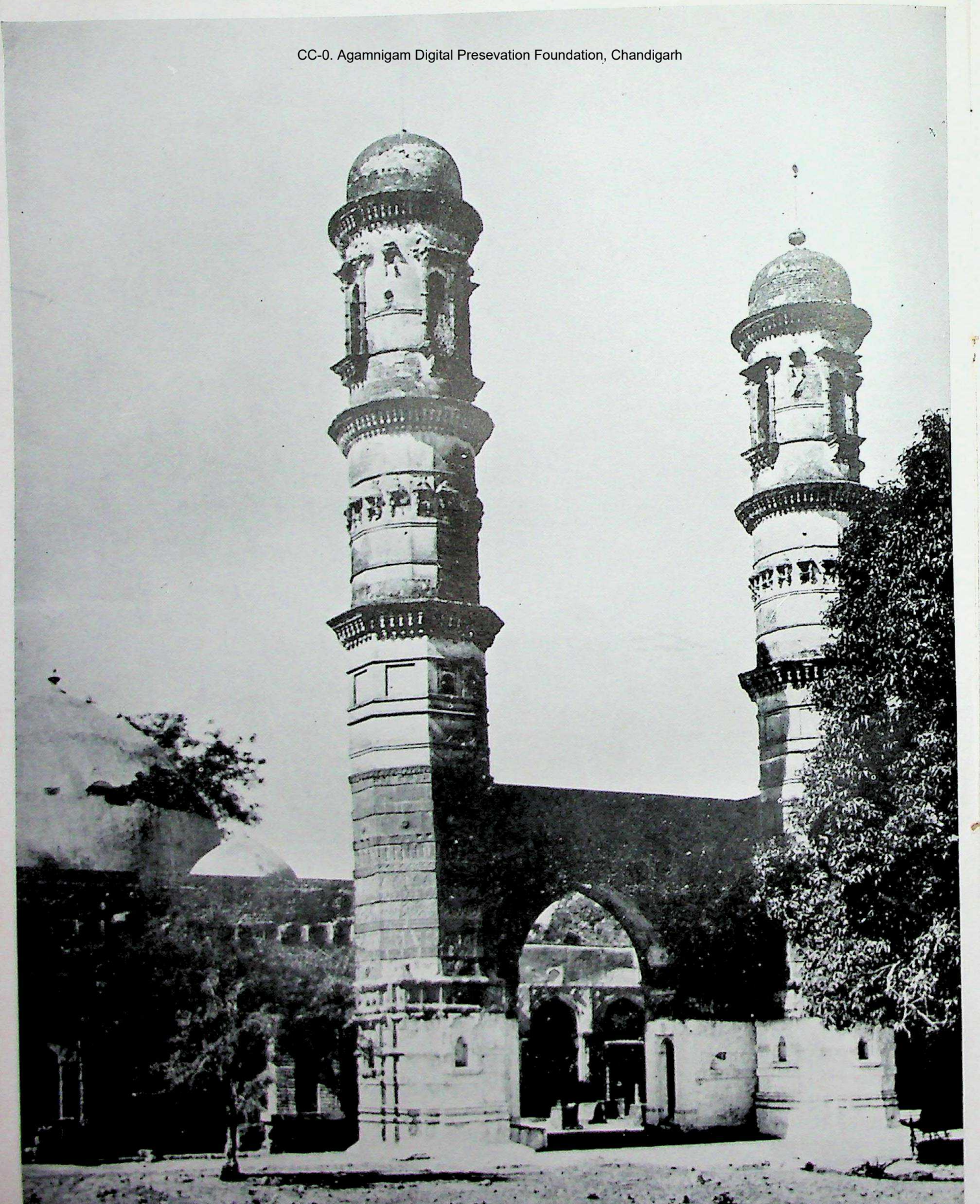

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← **56.** Bibi-ka-Masjid, Burhanpur.

57. Ahukhana, Burhanpur.

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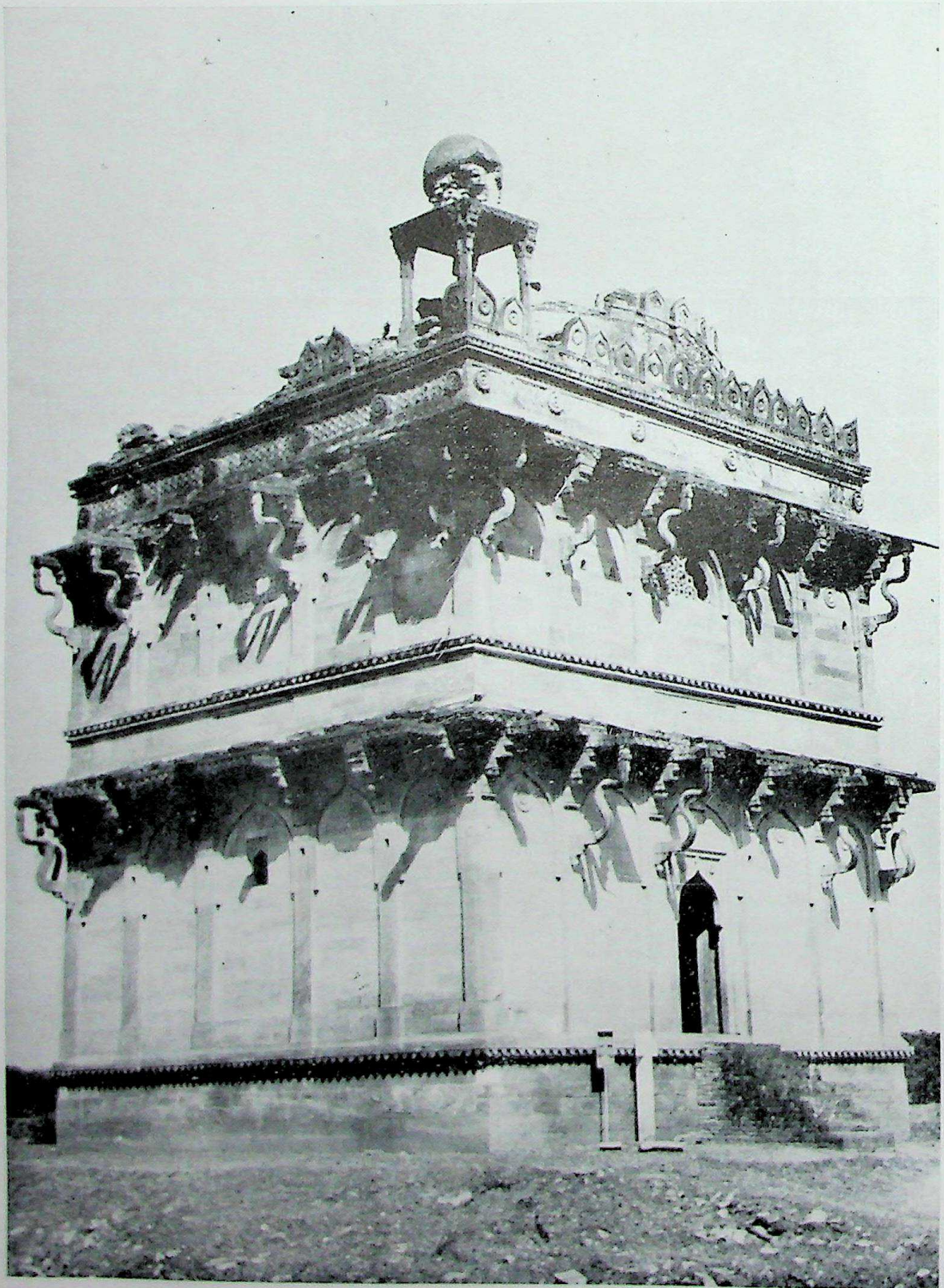
58. Shahzadi-ka-Roza, Chanderi, with the serpentinous harp type brackets.



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Spectrum of Style Range

For purposes of structural art, especially under Islamic thrusts in India, we should be in a position to divide the country into three basic zones: (a) the Indo-Gangetic plain, (b) the central Indian belt comprising Malwa, Khandesh, Vidarbha and the east Madhya Pradesh and south Uttar Pradesh, broadly represented by the Rohilkhand, Bundelkhand and Bagelkhand designations of the medieval times; and (c) the upper and lower Deccan (comprising Maharashtra, upper Andhra and Upper Karnataka). It is extremely interesting that almost the entire series of inroads of the Muslim invaders and others had been overland and hardly ever by any consistent maritime moves. Thus, inland geography was a major factor and the incursions had been also *centrifugal*, with the early nucleus located in the West Panjab-Sind tract, in the 8th century to 12th century A.D., and in the pivot of Delhi upland from the 13th century onwards. Another basic factor is that after the Ghazni-Ghori thrust and amorphous military establishments in Panjab, Delhi, Gujarat, Bihar and Bengal, the next major chronological *divide* had been the Turkish invasion made under Timur, around the very turning of the 14th-15th century A.D. (around c. 1398 A.D.). It brought a seachange in values, both in socio-political and religious art planes. Nothing was really the same in upper India after the holocaust. Besides, the extensive destruction caused by the invasion necessitated a fresh and large scale constructional activity and we find that virtually within a quarter of a century thereafter, the Mughals gain a firm foothold into a cockpit of political power and go from strength to strength for nearly three centuries. The three zones mentioned above, in ecological parlance, may be designated as the zone of attraction, zone of isolation and zone of disparate diffusion respectively, of all impulses moving into these areas. It is thus that the *first empires are always* (and had always been even in pre-Christian and early historic times) established in the Indo-Gangetic plains; the bones of contention had *always* been the central Indian belt; and the region of discerning but localised connoisseurship artistic, philosophical, ethical-social values, in an entrenched and comparatively conserved atmosphere, had *always* been in the Deccan or south India.

Islamic architecture, accordingly, has also to be divided into three style range categories; the *style* of the great Ganga plains (including Rajasthan-Aravallis but excluding Bengal), the styles of central Indian belt; and the styles of the Deccan. The middle-mentioned of these three received admittedly its impacts both from the north and from the Deccan, and tended to absorb them fitfully, without creating any individuality or originality of mannerism of their own. The real competition or even conflict in temporal individuality, thus, was between the *Imperial* powers of the plains and the *independent* kingdoms of the Deccan and this continuously kept the political balance from tilting abjectly in favour of the former. Thus, we should divide the

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fruitful Islamic years of art activity, accordingly, from 1200-1700 A.D., into two major phases A.D. 1200-1400 and A.D. 1400-1700, basically, but compartmentalise *each* of these two into three subphases, the northern, central and Deccan, in order to understand the fluctuations in its formulations and the totality of the changes effected, century by century (see chart).

It will also be seen that the empires centred in Malwa, Deccan, Bijapur, Khandesh and Kashmir were all essentially of post-A.D. 1400, or post-Timurid intervention. Only in case of the Bahmanis, their earlier kingdom began in 1347 (Pls. LIX-LXI) but lasted essentially upto 1422, whereafter the Baridshahi (Pls. LXII—LXV), Faruqui (of Burhanpur, Chanderi—Pls. LXVI-LXXI and Thalner) start primarily from 1400 (the year of founding of Burhanpur), the Nizam Shahi (of Ahmadnagar) and Imad Shahi rules, followed in the 16th century A.D., by Qutb Shahi (of Golkonda-1512-1681) Adilshahi (of Bijapur) upto 1672, after the last two broke away from the Bahmanid rule around A.D. 1490. Even in Gujarat, the Sultanate is a post-Timurid inauguration, from around 1411 A.D. after an early Imperial Delhi period between 1300-1411, while in Bengal, from about 1414, we have the Eklakhi period—the most mature phase of architectural creations and a break with the past, which had an amorphous Imperial flavour and went on upto 1515 whereafter the Mughal imprint on its architecture—though hardly liable to be compared in its grandeur or individuality with its *quondam* phases elsewhere—became common.

Thus, we find only at Panjab, Bengal and Gujarat that we have what may be called the variant architectural phases which, in every sense, are amorphous, in so far as the standardization of the mosque lineaments and models are concerned, though exceptionally praiseworthy in their own inherent indigenous character, as *vanguard* movements. Of course, again, for reasons already explained elsewhere, Punjab will have to be kept out, as it is a pre-existing '*mother*' *matrix* for the spirit behind the Islamic political, religious and architectural thrust and no less for the craft elements that go to enrich the mosques and mausolea and secular Islamic palaces of India in the succeeding centuries, and for which they drew their steady sustenance from Persia, Arabia, Egypt, Turkey and even far off Spain, It would, therefore, be invidious to treat the Islamic building movement in India either as some unconnected series of firm 'provincial' episodes or as straitlaced phenomena, but as the natural result of the stages of domicile, organisation and integration, of the stamina of their religions, inspired in this, most unambiguously, by the several thousands of saints, scholars and pious clergy that thronged not only the courts of the various kings, but also the metropolises and marts, seeking to enliven the cultural scene with the pursuit of their academic, religious., literary, cultural and spiritual aspirations and expertise. The language of the these mentors entrenched itself well in the soil, and became the fruitful nursery for the spirit of the rulers to grow and mature out of, and even here, one sees that there was a more salubrious and sheltered Deccan haven in for the linguistic-cultural nursery, while in Upper India, this began essentially from theKhilji-Tughlaq phase and flowered later, in the Mughal times, and was then duly liaised with the Deccani counterparts also effectively, notwithstanding political conflicts and contrasts. To a great extent, it may be said that the Deccan

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absorbed exotic religious-linguistic-cultural trends in Arabic, Urdu, Persian along with the Sufism of West Asian Islam, much more persuasively due to the insulated ecology, girt as it was by the Western Ghats, the Vindhya-Satpuras and the Eastern Ghats, and stood sentinel to the more gracious, if a shade austere, aspects of the Islamic way of life than the well and truly art-and-pleasure loving *penchant* of the Mughal court life in the North. Architecture fully underscores and upholds this rhythm by the frills and flounces of dainty refinement absorbed in the models in the case of the Deccan, while the totalelegance and rhythm of the whole model is perhaps unexcelled in the Imperial Mughal north.

The pre-Mughal art and architecture is often maligned as something of a 'monotonous reiteration of the self same feature (multi-domed roofing, or tapering mineret-like buttresses at the quoins), in the prosaic nakedness of its ideas and in the dearth of everything that might make for picturesque charm or elegance'. This is sought to be constrasted with the excellence and originality of the Mughal structures. It must be understood that when the Mughals came on the scene, not only was there a considerable pace of development in the building art of Islam in India, but also added to this, was the legacy of the new comers in their own original affiliations with Persian and Turkish traditions. This cannot be said to be the case when, for instance, Qutbuddin Aibak was left to his own devices in the very beginning of the 13th century A.D. or even when Firuz Shah had to introduce something special to instil fresh spirit into the prostrate body politic and disspirited crafts bodies, in the middle of the next century. The path of the reformer is always strewn with thorns and without any precedents to fall back upon. Yet, it could be said that they made the very best of a bad job. The Seljuk effervescence in the Khilji period, as seen in Alai Darwaza and Jamaat Khana mosque and its further cross-fertilization with the Multani traditions of the Ghaznavids, as seen in Ghiyasuddin Tughlaq's tomb (and even its later repercussion in Kabiruddin Aulia) were certainly picturesque but they were just episodes which did not represent a take off stage into meaningful further developments, because they were imitated moves. They did not formulate any general guidelines, by their limitations of scale, being just single structures with pleasing veneers. It was only a firm body of creations that could set a vogue and not individual excellences. To that extent, Firuzian attempts to expand the activity, consistent with the skills and resources available, was certainly not one to be cavilled at, even for its originality. It can be seen that several new innovations of form were set afloat, such as a pyramidal roof, a projecting portico with pediment for antechamber of a central sanctuary of mosque (as in Sultan Ghari), a deliberate exercise in volumes and voids, as in his Jami Masjid, and variation of structural forms, as in his *shikargahs*, in the terraced cellular pyramidal unit for Asokan *lat*, in the clearcut secular palace complex, in a raised base for larger mosques with massives entrance approach and bridged passages off the ground, and even introduction of ventilator courtyards for every square segment of a mosque, besides a central one (as in Khirki Masjid). If we consider the creation of the early mosques and *madrasas* in Damascus (Madrasa al Nuria al Kubra—*c.* 1172) Great Mosque at Rabat (*c.* 1191), or the mosque of Al Hakun at Cairo (repaired in *c.* 1002-13) with its cross beams from the springing points,

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one may realise how much conventional Firuz endeavoured to be, towards the tradition of a kind already known, which he was consciously attempting to integrate with his new venues for citadel or *madrasas* or special erections, and can appreciate how much of a vanguard movement Firuz created in India. The entire Jaunpur and Mandu architecture is virtually an extension of his ideas, models and formulations and had virtually nothing more (except in terms of large volume, in which also Firuz was an adept) to individualise them as new creations. There is also another aspect of the matter, namely, the environment in which he was building.

Now, it is an axiom well accepted upto modern times that structures should merge with their own natural as well as built-up surroundings and, if so, the erections of the Tughlaq period have an uncanny capacity to mingle and merge with the habitat around them and there was a conscious effort to keep the horizontal planes of structures fused with environment and highlight them only by the stark verticality of the corner *minars* and buttresses. It could be noted that in the prestigeous Mughal times, the architectural style especially under Akbar and Jehangir, tended to achieve this very element, namely expansive horizontal lines and planes and their fusion with the insistent rhythm of the repeatedly identical vertical motifs and units. By the very nature of the difference and richness of raw materials, the Mughal appeals to the connousseur, but, surely, to the building architect who revels in any structural rhythm, Firozian buildings can also have their own consistent appeal. In any case, in the period before 1385 A.D., Firuz could not have created extravagent edifices in costly sandstone and marble, (both of which he was surely familiar with) in the majority of his creations, for he had opted for the most easily avialable raw material namely rubble stone which were permanent and versatile; and pillars, lintels, beams, corbels, *chajjas*, etc. Secondly, many of the domes have ribbed exterior bands whose depression groove alone is now extant, revealing fragments of tile-work sticking here and there. Thirdly, the principles in construction are the conversion of the square into an octagon even at the beam level in square structures and supporting of the next polygonal beam work at their junction by vertical blocks of veneer stones (often of sandstone, as different from quartzite used for pillars and beams) serving as a corbel bracket or underpinning. At the octagonal level, there is also a small corbel at the junction. The dome proper is of rubble stone in plaster layout, carefully built up in segments as the outer ribbing functionally implies. It has, (as seen at least in some cases, as of Firoz's mausoleum) cut-plaster ornamentation of the star design on the top of the ceiling and medallions in other parts, and beautiful floral designs on the exterior surrounding surfaces, here and there, vouching for a high quality of plaster or stucco ornamentation achieved by the craftsman. There is the use of double pillars as well as single pillars for the pavilions and in case of the former, the abacus below the corbel is of a single elongated stone bridging both the pillar shafts and uniting them for further formulation above that level. Intersecting bracket corbels serve to distribute the load along the sides of the ring of the dome and towards the *chajja*. There is a battlement immediately above the *chajja* and another well within, on the octagonal drum of the exterior dome. But there are some of the buildings where,

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the lower battlement is not introduced and the drum of the dome sits on the very edge of the lower framework of lintels and the domes are fairly large with *applique battlements* only on the drums. These are seemingly the earlier models. Where double pillars are introduced in octagonal pavilions, the outer face of the pillar is cut in a pentagonal cross-section scheme with the obtuse angle on its outer face, like a wide wedge. This is a mannerism of Firuz Shah, seen also in his functionally more appropriate for structural experimentations until the *lakhauri* brick in the next century superceded rubble stone. His plastered exteriors with a minimum of ornament was, therefore, a *model* of his age, wherein he turned out to be a connoisseur of nature and natural form even for structures. His spartan outlook shunned overuse of colourful materials which will not fuse into the environment and may create an unnatural glamour which he was himself not in favour of. Thus, Firozian buildings, are part of the philosophy and symbolism of the developing stage of Islam towards its consolidation, and thus have a legitimacy for attention. Indeed, if the Moghuls with their avowed commitment to grandeur, beauty and harmony of ornamental colour and discrete models, could not have opted for sandstone or marble or profuse inlay, the result would have been questionable for their times. But, for Firoz Shah, the times were with him, and found in him a sympathetic patron of construction, without any *bourgeois* frills and trappings. If the Moghul era was an era of spectacular condescension, the Firozian was one of benign modesty, and it is this spirit that pervades the entire period and region, under his admittedly prodigious quest for structural expression and expansion.

The Hauz Khas complex (pl. LXII) gives a fairly adequate summation of the types of constructions attempted by Firoz Shah and their style or mode. We have isolated mausolea, connected pavilions seemingly used as residential parts (called 'convocation hall' by some), lake-view wings, L-shaped and in two storeys, the lower at the low-water level and the other much higher, these *dalans* or galleries partly including a mosque and *madrasa* enclosure also, not to mention Firoz Shah's own mausoleum (pl. LXIII) at the corner junction of the lake embankment. It is interesting to see certain broad principles kept in mind by Firuz in his erections here. Firstly,they were mostly of heavy stone work upto the terrace level of the constructions, involving cut stone repairs as to the tomb of Ruknuddin Firoz, son of Iltutmish's son Abul Fath Mohammad (Sultan Ghari), where the use of a thin vertical block under the junction of the polygon (already alluded) is also seen. This tomb, however, does not have a raised plinth but is at ground level and this was pre-Firuz clearly in its beginning, having been already created by Iltutmish. The purposeful pentagonal chamfering of the pillar shaft, besides also in its basal block and in tune with the octagonal plinth and also its foundational offset, would show that this is a craft device for the artisan to align the pillars properly to form perfect octagon, without any elaborate device of measuring angles, etc., but by mere bubble level and a plumb bob. This develops into the screen of oblique angled work in the Sayyid and Lodhi mausolea for the octagonal structures.

It is obvious that the Hauz Khas-complex has many phases of additions. For instance, the Hauz itself was a creation of Allauddin Khilji and

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was known as Hauz Alai. We do not know if we can point to any structural vestige still remaining, which could have been of Khilji's. But a hunch is that the ground floor part of the fringing structural *dalan*-complex, along two 'L' shaped wings of the Hauz, could have been essentially of Allauddin; and Firuz should have raised only the whole series to an upper gallery level, so that the structures including his own mausoleum that was built there could have an appropriate setting on the lake fringe, at that consistent level which is the upper ground level. The ground floor is simpler, of larger vaulted chamber (with arched frontage whose arch-outline is more the smooth curvature of Khilji arches than the slightly ogee shaped and four centred Tughlaq ones, with a straight springing line) over which, besides galleries, Firuz also built domed structures, punctuating the line. From the terrace of the upper gallery, he also gave a flight to steps to the tall and narrow arched window-ventilators to the drum of his mausoleum, of which two are true open window types and one is a false window, purely ornamental, and balancing the real ones.

The ground floor vaults should have faced the original water level conveniently; and when, because of the silting of the lake and damages to its inner channels (which also Firoz is said to have repaired with *gach* (cement—apprently lime concrete), the level of the lake of Allauddin's times tended to rise higher in the time of Firoz, he had necessarily to raise these upper level galleries. It is interesting that he had provided at regular intervals the narrow stairway access to the lower level in his time which might not have been necessary earlier. The technique followed for this is very adequate, confident and simple. He organised the staircases in right angular passages and built their ceiling by a series of semi-circular barrel-vaulted passages, resting one above the other, the outermost bearing the projecting vaulted entrance (either of the lower lake-view end or on the upper end of the gallery level, in which latter the beams have been organised in a half-octagon to support the domed head-load on these entrances to keep them in position. In each level, the springing of the vault become the stage for supporting the *next* vault and its pilaster is a pier that has been merged with the side wall. This technique is different from the Mughal technique and even later pre-Mughal ones, where the vaulted ceiling of the passage will be generally steep and *parallel* to the descent angle of the steps in a continuous shell, whereas in Firuz's steps, the ceilings will be mostly in horizontal planes and descending or ascending through supports at each level in horizontal stages over the wall and the height of these ceilings from the steps bearing a specific proportion to the total depth or height of the entire descent or ascent. This enables men or women of any height to pass through these narrow stair cases conveniently. This may incidentally show that these stepped vaulted passages to the ground floor gallery may have been added by Firoz to the pre-existing ground floor vaults, which he may not have constructed. Firuz had great use for these narrow barrel vaulted passages in his Jami Masjid inside Kotla Firuz Shah and other structures there and classically in his maze of stairways at Hissar Firoza. This kind of a right angular barrel-vaulted entrance model had been introduced by Firoz in his own mausoleum in two of its entrances which appear to have been intended to give a security position for guards to stand against any treacherous assaults

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on the celebrities praying inside, including the Sultan himself. On the other hand, the step arrangements of Mohammad Tughlaq's times, as at Bijaymandal comprise overlapping astylar placement—a feature generally prevailingly preferred in the Sultanate period.

It is well known that the arch arrangements in Firoz's structures are characterised by the cross beam at the springing level. In the earlier stages, as indeed in Ghiyasuddin times onwards, this was serving as an additional support to the load above. But the main purpose of the beam is only to support the semicircular perforated window screen (in which the *jali* is generally arranged in octagonal perforated design work in sandstone). In Firoz's buildings sandstone is employed mainly for such windows, or *chajjas* outside or the *kanguars* over the edge of the wall or on the drum of the dome; and elsewhere only rubble masonry with a plaster skin or quartzite stone slabs are used.

It is found that the squinches used in the interior of the domes of Firuz at Hauz Khas are exactly similar to those employed in his repairs to the *madrasa* of Allauddin in Qutb enclosure, in the horizontal corbel block, alternating with wedged series of stone blocks, and in some cases with a single wedged block at the corners. This is an additional evidence indeed of Firoz's repairs to that *madrasa*. In the mausoleum of Firoz, this squinch is also supplementary to the pendentives which is also a characteristic of the Tughlaq period. Sometimes, as in the Alai madrasa, the wedged squinches are themselves taking the shape of spherical triangular concave depressions on their faces. This is to be deemed as a transitional stage of the stalactite *pendentive* where, in plaster work, such concave honeycomb-like parts would have been worked out, as in Sayyid monuments.[1] In fact, the earliest stalactite pendentive would be a plaster covering of a stone squinch core, as found often at Hansi and Hissar with plaster work indicating honey combs or without it. This is partially seen continuing even in the *dalans* of Rajonki-bain baoli and in Sher Shah's Qila-i-Kuhna mosque (*c.* 1545) in Purana Qila. Another interesting stage in Hauz Khas lake side gallery is the *madrasa* built by Firoz Shah here, seemingly forming a separate enclosure at the north end of the east wing. Here, the lake side walls which have a series of openings have also some closed arched recessess serving as *mihrabs* for the mosque integrated with *madrasa*. According to some scholars, the upper floor gallery at other parts, is itself the *madrasa* and not the one under discussion above. It is, however, seen that, on the one hand, there is always a mosque attached to or nearby a *madrasa* and at Hauz Khas except this mosque arrangement, there is only the Jami mosque at the opposite corner, in its courtyard and the Lake front mosque would make it a self-contained complex; and, above all, the ceiling pattern of this complex is totally different from the rest of the gallery ceiling on the L-shaped lake view wings, but totally in tune with the ceilings of several of the buildings inside Kotla Firuz Shah

1. Since masonry work had been replaced by stone work in Mughal times, we may note that the stalactite pendentives take a longer time, after Firuz, to evolve and appear in Sayyid and Suri (Sher Shah's) times, though they have also been coeavlly well refined in plaster itself, further, as in Humayun's tomb. This shows that Humayun's tomb (1564 A.D.) well succeeds the Suri architectural development during the interregnum.

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(besides Hansi and Hissar in its Firozian structures) like the pyramidal Asokan *Lat* chambers, structures in the palace complex etc. for both pyramidal and domical roofs.

The last mentioned needs some comment. This general pattern of ceilings elsewhere in Hauz Khas are of the vaulted ceiling type with drums having squinched corners in the interior in the stages of the gallery passage. But these north end mosque *cum madrasa* ceilings are one and all of the four-concerned flat-arch type of ceiling and carry a flat roof also above, they are *not* on the squinch principle. They have the corners of the wall unadorned and plain upto the ceiling which has a mild curvature towards the wall from its centre. We have variants of this kind of ceiling, later also in the time of the Lodhis, when the cusped ceiling, as in Bara Khamba (*c.* 1451 onwards), is seen. However, one is sure that, during the mid-Firoz period, the seeds of such an advancement in the ceiling would have been fully laid, as they are found insistently employed in his Kotla Firoz Shah. Accordingly, it is felt that this northern most gallery and enclosure which has the mosque was probably used as the *madrasa* (referred to by Firoz) and has the flat-arch principle of ceiling which was the chief development over the squinch type, in secular as well as religious architecture, in Firoz Shah Tughlaq's time, as we know that Hauz Khas was developed only by Allauddin and Firoz, and a *madrasa* was organised here only by Firoz. The secluded nature of this part fits into the requirement of a *madrasa* and its self-contained mosque. Incidentally, this is the only case of a mosque whose central *mihrab* alone would have been closed, while the rest were openings for ventilation and view, and might have also served as *mihrabs*.

Finally, it has been claimed that Firoz Shah's buildings are devoid of any ornamentation. But whoever has seen the interior of the Mausoleum of Firoz and its cut plaster star-patterned ceiling, seemingly decorated orginally in the tile work as well, would have to revise this view[2]

Idgah Kharera

The monument called Idgah at Kharera village (now within Hauz Khas enclave, close to Siri Fort) is a landmark. Not only is it politically the witness to the Turkish holocaust under Timur who after he overran Delhi,[3] might have held his of court at this monument, seemingly placing his throne at the top of the stairs where a *mulla* leading the *Id* prayers would have normally sat, and dispersed his honours to his supporters in his onslaught on Delhi. According to Zafar Hasan and others, the great Idgah behind the Qila Rai Pithora on the rocky uplands was the venue of Timur's court; but the context of the passage in

2. These seems to imitate the designs of the ribbed vault patterns of mosque of Bib Mardun (*c.* 999) at Toledi (Spain) where the superstructural workmanship however, is of brick and in the *Madrasas* of Syria, Iraq and classic Persian Seljuk architecture in the 11th-13th century, alongwith the integrated mosque and *Madrasa* as at Cairo (Sultan Qala'un) or Qusvin and Sivas and Aleppo (Persia and Syria).
3. *Malfuzat-i-Timuri*, Elliot and Dawson, Vol. III, p. 443.

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Malfuzat referring to this seems to show that the *Idgah* mentioned was closer to Hauz Khas and Siri, than Qila Rai Pithora, and the battle of Mohammad Shah Tughlaq against Timur was itself fought in the *maidan* between Sirifort and Hauz Khas Lake. The matter seems to be calling for a more careful examination. This structure with two tapering *minars* at the ends and the lofty wall, has at the centre of it a narrow cross passage with vaulted ceiling and staired gallery going all the way upto the crest level of the arches of the *Idgah*, for the *mulla* to sit. The wall has a series of false arches of *mihrabs* all similar to each other and has triple concentric arched recessions projecting beyond the jambs, which are somewhat battered, the pendentive arches having a very mild inward curve in their lower outline. This style of pendentive is indeed already prevalent from Allauddin's times, but the taper or batter of the jambs is an essential Tughlaq device. The corner *mtnars* are also more similar to those of Khirki Masjid (*minar* buttresses) with a bald circular domed top. This has also an inscription on it of a few years after Timur and is referring to his destruction in Delhi. The *Idgah* itself is of early Tughlaq times or even of the late Khilji transition stage, (if the inscription had come here later to the erection of the *Idgah*), since it is of a piece with Chor Minar and Siri Fort gate which are all near by and all of which are Allauddin's creations. It is also interesting to see that the central cross passage by the side of the main *mihrab* to have access to the rear side is essentially an *early* device and is generally not seen from late Tughlaq times. It is seen elsewhere in the old city (Qila Rai Pithora) *Idgah* and in the Badaun *Idgah* of Iltutmish. This also makes this Kharera *Idgah* Tughlaq or pre-Tughlaq, and certainly not post-Timur in its original construction, notwithstanding the record—which is not also a foundational one.

It is again and again being repeated by many that the Quvvat-ul-Islam mosque at Mehrauli started by Qutbuddin and enlarged by Iltutmish and Allauddin, was, in design, confused and incongruous and even unislamic in its appearance. Qutbuddin himself did not make any bones about the fact that he had utilised old material of some temples in its construction. Naturally, the 'Hindu' character of these stones used have not been obliterated, but they have been assembled for Islamic usage as mosque whose main features are a sanctuary, aisles, quadrangle and *azan* tower. It cannot be stated that the Qutb mosque was lacking in any of these. If to a non-muslim, its congeries of parts in structural materials of an already carved Hindu kind, is felt as a miscellany, to a muslim and much more so to its own builder, the supercession of Hinduism by Islam at his hands would alone have been the main symbolic purpose of such an usage. Qutbuddin was not lacking in raw materials for his mosque, around him, but obviously he derived a special satisfaction for using Hindu materials broken from the ruins of temples, as it was to be hallmark of the *switch-over*, for those who were concerned, and this was not lost upon the contemporary Hindus as well. Further, his very erection of a massive screen arch (*maqsura*) in front was a deliberate exercise to give it an Islamic imprint and as far as it was concerned, it was a pious, triumphant and confident erection of the first congregational mosque (Jami Masjid) in his capital, and he was not overmuch bothered about chaste articulations. All the same, it could be seen that the basic elements of

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a mosque were fully there. But when Iltutmish expanded the screen, he added some minor details, such as false niches in the heart of the screen wall which are ornamental and followed the same technique in building the arch screen. In fact, even in his Sultan Ghari, which he built a few years later, we find the same astylar corbel arch-principles employed, as in the Qutb mosque screen, and thus it cannot be said that the facade was an indigenous erection. In fact, to a simple but formal mosque at that stage, the screen and the *minar* became the emphatic assertions of the Islamic presence. Even the very conception of the screen is certainly not an Indian creation as Hindu India did not have any use for such a screen in any temple. Whatever was employed there as a constructional principle was a matter of technique of the age and suited to its dimensions, and hence had nothing to do with the *credo*, which was clearly Islamic. If the surface ornamentation on it was considered partly Indian, it only goes to underscore the fact that even Indian artisan employed were under compulsions to erect a screen of these dimensions and character which they well know was not part of any Hindu usage in locality though not in the underlying technique of building but was certainly an achievement in itself. The question whether it fitted into the low colonnades around the cloister that was behind the screen depends upon whether this roof behind was single storeyed or not. At Ajmer, the mosque was on stilted pillars and lofty, in tune with the screen in front. It could well be and evidence is not lacking for it that least on the western sanctuary side, the cloister would have risen upon the very top or just below the ogee top (inner) of the screen allowing the screen to rise just higher than the sanctuary roof and perhaps the roof also had some simple domed structures, in Iltutimish's times, of the ring dome type, even using Hindu ornamental cusped dome ceilings (as we find at Sultan Ghari). We have Iltutmish's grave and Ahai-Din-ka-Jhonpra at Ajmer to vouch for the ultimate pattern or skyline. Further, if Qutbuddin could, with facility envisage the ground floor at least of the *minar* which only Iltutmish completed, and which was part of a Ghaznavid tradition, there is no reason to doubt his access to the resources and ideas for Islamic character to be implanted on his mosque. The Qutb mosque, as the first mosque in India, has all the plus and minus factors of a victorious new regime desiring to rub salt into wounds of the vanquished.

If we see the development from 1225 to 1325 A.D. at and around Delhi, at Bayana, in Gujarat, as at Cambay and Mandal and in nearby Hansi and Hissar, we see that there was a concerted attempt to formulate erections in the form of Jami Masjids for the new Imperial faith which was more a rallying banner than any deep inherent religiosity and, step by step, by utilizing structural vestiges of Hindus which have been superseeded by the conquest, on the one hand, and by steady efforts at a workable pattern for the creation of true mosque scheme, on the other, considerable headway was registered using mostly local artisans; and what could be considered as a dignified layout for a Jami masjid, complete in all elements, including *zenana* gallery had been noticed by the time of Mohammad Tughlaq. Both Allauddin and Ghiayasuddin had all the while been involved in several military compaigns—which Mohammad Tughlaq himself was more than equally engrossed with. Notwithstanding this, a silent movement for building erections was also

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afoot, mostly using indigenous craftsmen and their devices and sandstone material, but with an overall purpose and ideal that had not also been allowed to be dimmed. It would be possible for historical criticism to level its guns against the deliberate smothering of the Hindu-Jain erections of the pre-Islamic periods, but that was part of the destiny that had overtaken the rulership, at and around Delhi, in that fateful period when West Asian Islam was most assiduously expanding its control on the neighbouring areas by the sword arm and wherein even Christian or Judaic or also other shades of Islam, were not only receiving the same inexorable short-shrift of subjugation and submission and their own indigenous craftsman in these areas were equally well making their expertise available to the victors. It would be legitimate, thus, to feel sorry that institutions of the past should be obliterated in the triumphant march of Islam. But it would be historically untenable to gainsay that architecture, as was being gradually planned by the victorious Sultans, in the promised land of the vanquished, was coming up to the requirements of such a building venture.

In that light, the transformation on the architectural plane wrought in the century between the opening quarter of the 13th to that of the next, would have to be considered as foundational and whatever was lost by the indigenous people in terms of their faith, values and security was adroitly seen modified into a new coordination, a new compromise in the structural plane; and in the ultimate analysis, it can even be contended that upper India, a century after the triumphant political change of scene for Qutbuddin Aibak, became a confident practitioner, seeking a new plane of achievement in the aesthetic fulfilment of the hall marks of the alien religion, and getting it gradually subverted by the indigenous craft expertise. This dichotomy between political animosity and subscription to creative virtuousity and cross-fertilisation is the index of any traumatic age, and only the degree of antipathy varied, but not the inner will of Hinduism to weather the storm and live together for another brighter day.

When, in the Gangetic valley, in the pre-Christian centuries, Buddhism, carried the day psychologically against sacredotal Hinduism, there was conflict, discord and even internecine disharmony. But, notwithstanding the entrenched establishment of Buddhism until the opening centuries of the Christian era, the slow movement of Hinduism, behind the scene, and certainly in a low key and in dormant state, did not cease to apply itself to the continuing quest after its own ideas, and by the time of the Sungas and the Kushanas and later, of the Imperial Guptas, was indeed able to turn the tables on Buddhism in both art and religion and relegate it to slow but sure degeneration and destitution. The people, thus, as an active entity, had never succumbed to the rigorous aggressive socio-cultural movement in the body politic by displaying King Canute-like myopia to see realism, but had adjusted their evolving genius to a rational co-existence with contrastive view points and ultimately evolved a working programme to organise a more peaceful inter-relatedness, and the restitution of their own cherished institutional movements in the process. The period, thus, between Qutbuddin and Mohammad Bin Tughlaq was politically traumatic, but artistically, a period of probation

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for the rulers, of art-education for craftsmen and ultimate interchange for the people. It may be that the intrusive creed of Islam appeared to be too harsh a doze for the pacific ideas of Hinduism to be instantly reconciled with, as compared to Buddhism of yore, but the pattern is the same and by the time of the close of Firoz Shah, a working peace had been restored in civic stability and artistic mainsprings. It was only requiring another spectacular and outrageous incursion, as that of Timur, to cut whatever deadwood remained and to set the stage for a most pragmatic understanding between vast communities, dissected by religion, to integrate their own future. This was exactly what happened in the Mughal times until the last of the grand Mughal over-reached himself and sowed the dragon-seed, again, among the people to cause the sure destruction of the grand mansion of Islam and Mughal empire itself, and rouse specific movements of revolt, as that of Shivaji Maharaj. This is part of the cycle of evolution and mutation. But all these help and not hinder art values which consider each challenging new situation as whetting their acumen, further, for creative and harmonious formulations. As an art historian, thus, one should hardly consider the pre-Mughal times as uneventful in architectural and art plane, but should assess the actual creations made in their own context and ecological equilibrium.

Hazar Situn

The Bijaymandal (pl. LXXIV A and B) remains are unfortunately partially preserved. But whatever is there gives some indication of the level at which the monument has been raised and ancillary structures at the same level, though not directly connected with the larger monument which was seemingly the vestige of the 'Hazar-Situn' palace within Siri, (started in Khilji times but considerably elaborated during the early Tughlaq Period) and became such a cynosure of attraction that, after the sack of Delhi, Timur records that the ladies of his entourage went for sightseeing in the town, especially to see the 'Hall of thousand columns' Hazar Situn). The elements that inform this large structure, as yet remaining are: (a) the method of approach, (b) the staircase of the roof, (c) roof top structure, and (d) the main terrace. As regards (a), it is seen that two parallel staircases sunk into the ground floor terrace on the periphery of the rear side (south face) are leading to the main terrace which contains the pillared hall, below which the ground floor seemingly had not only subterranean chambers but also storage for various commodities and approached through circular openings let into the main hall floor and to be operated by ladders into the storage. The sides of the main terrace which have yet the bracket corbels in position partly should have carried an open gallery, below which also subterranean chambers existed. These galleries should have been at a level below the main hall and terrace and should have similarly borne open galleries at the upper level, facing into the terrace. The pillars of the hall have double and single pillar shafts with keeled arches rising above them, not unlike those of the Khirki Masjid, upto which time the age of these keeled ones were continuing; (b) the subsidiary staircases that lead to the top terrace which is confined to the western periphery of the ruins, have stone and plaster work and

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astylar corbel-devices for the ceiling of the staircase vault. It could be contrasted with the typical vaulted ceilings of the passages seen at Hauz Khas and should thus be earlier to Firoz Shah. In some stretches, they preserve corbelled stone ceilings, for the stairway and are at an angle which are decided purely by the height of the staircase overlap. Vaulted ceilings however, are found only at the topmost passages of the staircase which are broadly comparable with those of Firoz Shah.

The topmost terrace carries a batter-walled single room square structure which is externally veneered in sandstone and provided not only with *jali* windows but also with an exterior band of elephant tooth or cusped border frill decoration in sandstone. Provision on its very top roof had also been made for four circular shaft-holes with the mouth carefully bound in a sandstone ring and of about a foot diameter, seemingly intended for fixing bamboo or wooden pillars which will form an open canopied *Baradari*-like structure, perhaps of cloth awnings. The batter of the structure is only external but internally, this stone chamber has square walls of the interesecting barrel-vaulted type with the vault ends privided on their inner face with stone facings wherein the arch at springing level makes a sharp quadrantal inward curve, and the central part of the chamber becomes a four point arched dome without any spandrels or squinches. This should certainly be compared to the period just before the Khirki Masjid. There, the arch face does not have any sharp inward curve as here. We know, however, that batter wall continues from Ghiayasuddin's times,' through Mohammad Tughlaq and Firoz Tughlaq's time, down to the early Sayyid times, as seen in the smaller of the Dadi-Poti pair at Kharera, which internally also earries the Tughlaq legacy, although the dome in its high and massive rise has Sayyid propensity and is capped by a slender four pillared lantern finial which is a clear Sayyid mannerism, as seen even in Mubarak Shah Sayyid's mausoleum, and is pre-Lodhi.

The ancillary structure, at ground level to the west of this massive Hazar Sultan or Bijaymandal remains (pl. LXXIVC), is a well organised erection, seemingly a mausoleum with a pair of vaulted high arched entrance on each side of thick walls, within which the dome is reached by corbel pendentive half-domes supported by small wedged brackets in the corner at the junction of the springing of the arch, but the central faces of the wall do not carry any dome support devices. These, on the whole, by their features, seem to be nearer the interior design of Alai Darwaza or Jamaat Khana mosque, and are further characteristic on the exterior by its massive drum with continuous arched niches, the cardinal ones being open windows and the others being false. There are also niche recesses, on the upper drum at some points, and the parapet of the wall below having totally fallen, the nature of the parapet is not capable of being examined. The only other instance where niches are seen in the drum is in Kashmir in the tomb of Zain-ul-Abdin's mother (*c.* 1417-67) at Srinagar. The dome itself is rather shallow, ribbed and squattish, going more with pre-Tughlaq to Tughlaq mannerism. On the whole, by its proportions, high arched open entrances, and interior drums, this seems to be a late Khilji structure datable to *c.* 1320, perhaps repaired in the exterior top in the Sayyid period and if so, together with the early elements of the

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Bijaymandal put these structures in the Khilji-to Sayyid time range.

Kotla Firoz Shah (1354-1490)

This Fort-cidad el has some outstanding structures of various kinds, the Baoli, Jami Masjid (pl. LXXV A and B), Royal palace ruins, the gateway-complex and the pyramid carrying Asokan *lat* (pl. LXXVC). The constructional devices include the typical square as well as circular flat-arches, (seen elsewhere in Firoz's mosque cum *madrasa* at Hauz Khas) in several intances; hollow dome with pendentive half arches, as at the entrance to Jami Masjid; barrel and pyramidal vaulted chamber with a central pendentive knob-stopper. There are as many of five examples here of this pyramidal roof style, seen elsewhere at Sultan Ghari (in Firoz Shah's repairs) and within Dar-ul-Aman, opposite to the 'Balban's tomb' where again Firoz Shah carried out extensive repairs. As far as the structural devices are concerned, at Kotla, three examples will merit special mention. The first highlights the outstanding enthusiastic canal and water works improvement done by Firoz at several places. Here, in Kotla, a triple storeyed Baoli (fig. 54) has been provided with elaborate terracotta conduit channel arrangements from the highest level to the main water shaft corridor level below, in the form of transverse pipe passages and cistern provisions, which have to be admired. The underground, man-height passage below the outer ground level to the east and leading directly from the periphery of the river side rampart wall to the well could have either been for the diversion of flood waters of the Yamuna river (which was immediately on the eastern periphery of the fort wall) into the Baoli or for leading animals, especially horses directly into the cistern level gallery of the Baoli. The channels and cisterns have been carefully organised seemingly to bring water during the dry season to the well and to keep the cisterns also filled up all around the lower level circular cloister, the purpose of the cisterns themselves being probably for watering the animals after having been fed .The covered passage on the eastern perimeter of the upper story, already mentioned, should thus be for allowing the horses to be led down to the lower story directly, while the upper floors would have been used by the riders and other attendants. In that case, this was not a public or even royal well, but for the riding and pack animals of the Royal stables, to be periodically washed, rested and quenched of thirst. If so, this was indeed a unique construction.

The second feature is that of the pyramidal structure that springs high, on top of which the Asokan inscribed column of lofty, polished, buff red sandstone (two of which the antiquarian instinct of Firoz induced him to be brought here as well as to the ridge from their original location, as described by him in his *Futuhat*. The pyramidal cellular structure was clearly intended only to highlight this ancient column, whose real identity was not known then, but the structure itself, in the process, became a great public curiosity of his times. All the same, the raising of this cellular chambered structure, to three storeyed levels with staircases and terrace layout, would show that this building was also to be put

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54. *Baoli inside Kotla Firoz Shah.*

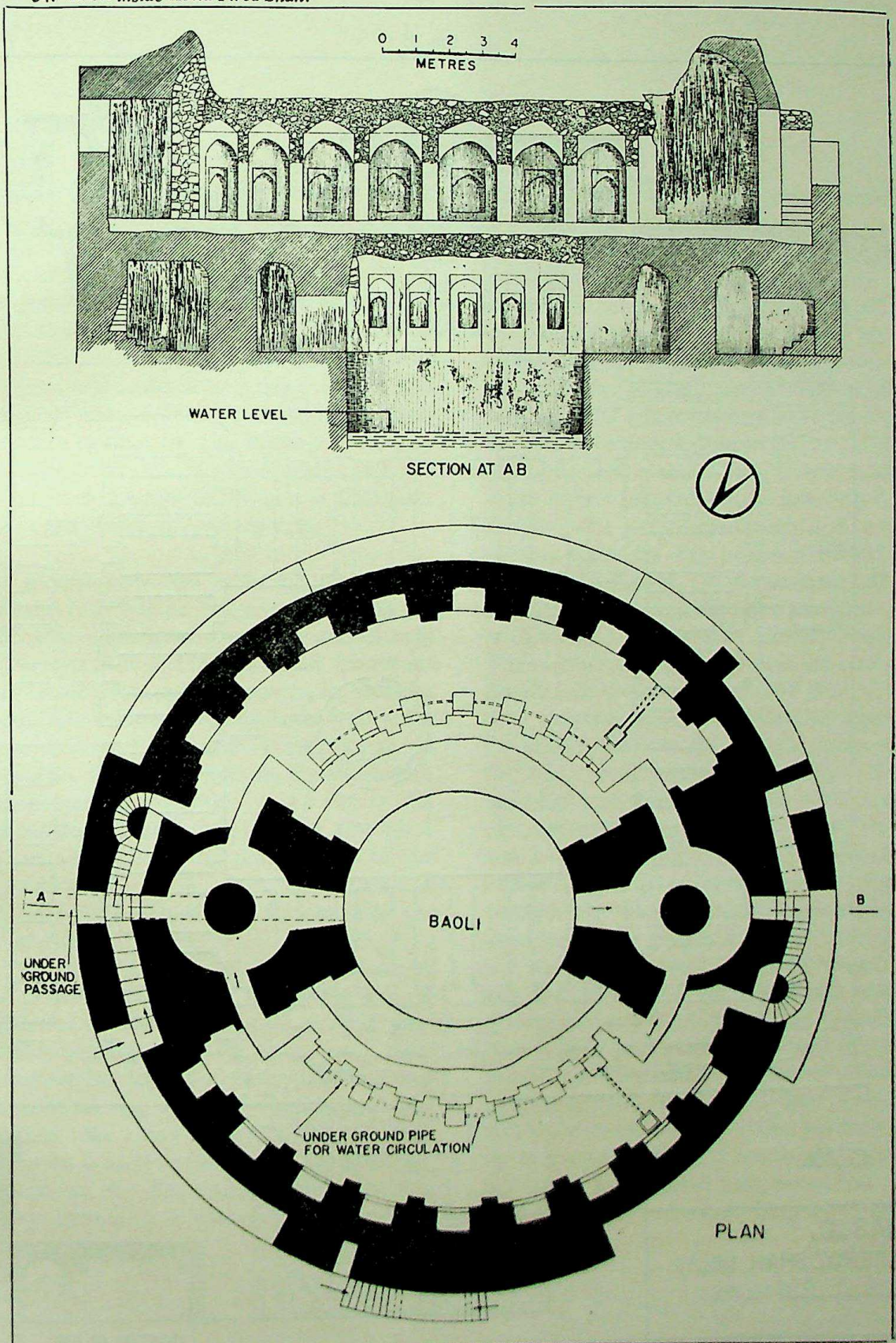

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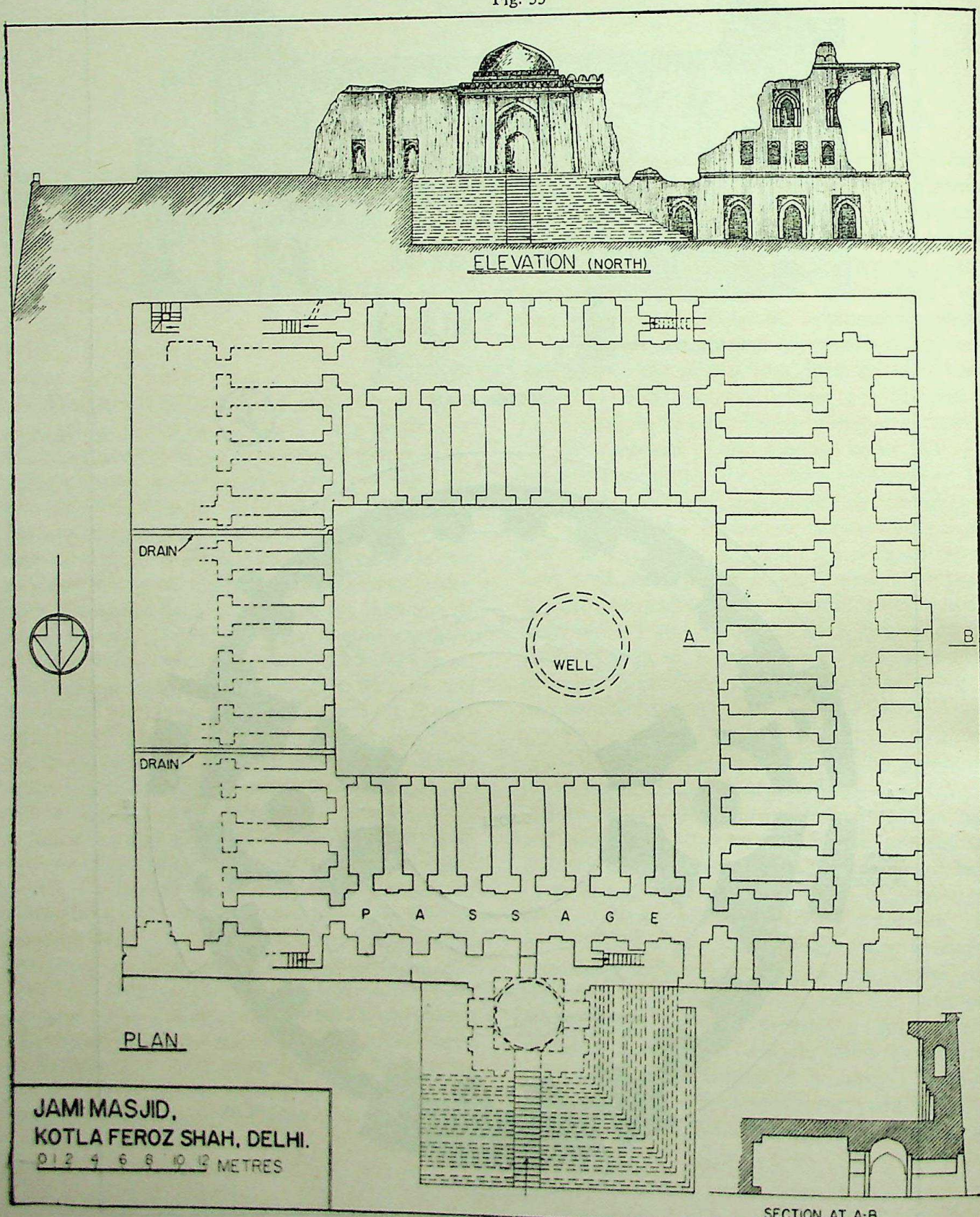
Fig. 55



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to considerable use. Its nearness to Jami Majid, to which the *lat* at the top was to serve as a symbolic *minar* would show that it could have had some link with it, perhaps by the same bridged passage by which the Jami Masjid was linked to the royal apartments further to the south. Be this as it may, the very organisation of the pyramidal cellular structure itself would have involved some deliberate imagination exercised on this project by the Sultan, seemingly on an existing parallel elsewhere outside India and goes to speak eloquently of Firoz's multifarious interests in architectural involvements.

We should now deal with the magnificent Jami Masjid (fig. 55) he constructed just to the south of this pyramidal structure and closely abutting on the river side rampart wall. Its layout resting on a subterranean cell terrace, in order to present an elevated location, recalls the well worn usages of Firoz's times and before it, as at Khirki Masjid, Begampuri Masjid, Kalan Masjid, etc. The projecting entrance at the top of the steps whose dome is still luckily intact also bears out this formula. It is in the organisation of the space inside the mosque that Firoz's architect clearly draws our admiration. In tune with the Jami Masjid from the time of the early Tughlaq period, provision was made for *zenana* prayer chamber at one end (southern here, because of the location of the Palace area) of the main prayer chamber which appears to have been most economical for the possible strength of devotees who might be thronging it every Friday and notwithstanding the fact that today, barely the strident back wall of the prayer chamber and and a little of the flanking cloister parts alone stand, they have the tell-tale signs, typical of Firozian style, besides the very feature of the back wall face and core themselves, giving us sufficient clues to its pristine layout. There is a clear indication as far as the *sehn* or courtyard is concerned, that it had one large opening in the centre and cloisters on the four sides, each of three bay depth. For this, the model (though the Jami Masjid would be relatively earlier) will be Begumpuri Masjid. The wings seem to have been of arcaded nature, borne upon double pillars in the courtyard edge and single pillars for the middle rows. Appropriate base-floor slabs have been fixed on the floors to carry these double and single pillars shafts—again on the model of Khirki Masjid or Begumpuri Masjid. On the eastern side also, the cloister overlooking the river has been integrated with the fort wall with a similar three-bay side. The northern side alone has the ceremonial entrance into the raised enclosure from the surrounding ground level. It is in the organisation of the prayer chamber that certain innovative devices had been adopted. Fristly, the prayer chamber was axially five bays deep towards the east, separated into five main *mihrab* bays north-south in the central part, and five more smaller *mihrab* bays, along the flanks. These latter, particularly on the south side, seemingly had pillared support at ground level but with a mezzanine stage which would have corresponded to the top level of the main central *mihrab* series, where a screened *zenana* enclosure was organised whose own ceiling level would have been of an average height enabling erect movement of royal ladies within it, while the lowest floor level chamber below the mezzanine was also perhaps sheltered for privacy by a kind of perforated screen wall, but would hardly have been about five feet high upto its ceiling and would have been useful simi-

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larly for bending and kneeling or sitting for women devotees during prayers (and as a *Tasbth-khana*). The fact, however, that both the upper mezzanine and the lower floor level chamber have been provided with five *mihrabs* each and repeated on both the northern and southern flanks would show that a division as between royal ladies and general women votaries was also intended since the former had direct access through a bridge from the neighbouring apartments to the mezzanine level, while the latter had ground level staircases in the thickness of the southern side wall of the mosque. The domes of the upper *zenana* gallery would surely themselves have been of an elevation common with the ceiling rising over the five main bays in the central part of the prayer chamber which would be in tune with the common roof terrace for the northern-southern and eastern cloisters. The back wall of the mosque has a rectangular rear projection to the central *mihrabs* of the prayer chamber. The access to the upper and lower *zenana* galleries from both sides has already been described as through covered stair cases and a bridge. A very interesting cellular cross-communication (pl. LXXV B) was also establised through a high and vaulted passage, enough for movement only in single file, across from one *zenana* chamber to the other at either flank, laid in the thickness of the sanctuary wall, above the *mihrabs* level of the main prayer hall and at the same level as the mezzanine chamber. This seemingly gave unfettered privacy, trans-mosque movement for entry as well as exit for the royal ladies. This is perhaps the *only* example of its kind in any mosque in India and should emphasize not only the innovatory and original capacity of the architecture of Firoz, perhaps directly under his guidance, but shows also the great respect that the king had for the privacy and unencumbered movement of ladies. It also established the links for ladies of the harem to move from the northern part of the citadel having the pyramidal structure to the southern part, through the bridged passages unnoticed, even during days other than Fridays when they had to move around from one side to the other. In view of the fact that river gates in the rampart wall on either side of the mosque gave direct access to the river (which Firoz Shah brought nearer to his fort by cutting a channel), no *wazu* pond, as such, would have been found necessary within the mosque, although a small square depression appears in the middle of the square, open courtyard, where it is open to the sky, to take storm water under the floors of the cloisters towards the side wall. The only example of a core passage in the thickness of wall seen almost exactly contemporary to Firoz Shah's time, outside India in West Asia is at Cekirge (mosque-*madrasa* of Murad I—A.D. 1366-1385) in the Ottoman empire, near Bursa.

The southside of Kotla citadel was separated from the northside by a thick cross wall which ran in the centre almost across the entire east-west width and returning southwards led to the main entrance gate into the palace-complex which was set at the centre of its north-south stretch and was an elaborate affair, with two main gates and closed adjacent walls forming a barbicon-like portal cubicle, for the security of the entrance, with a bastion added to its north-west corner. Internally, they were immediately provided, on their further southern flanks, within this gateway-complex for military quarters in a series of pyramidal-roofed pavilions and attached vaulted

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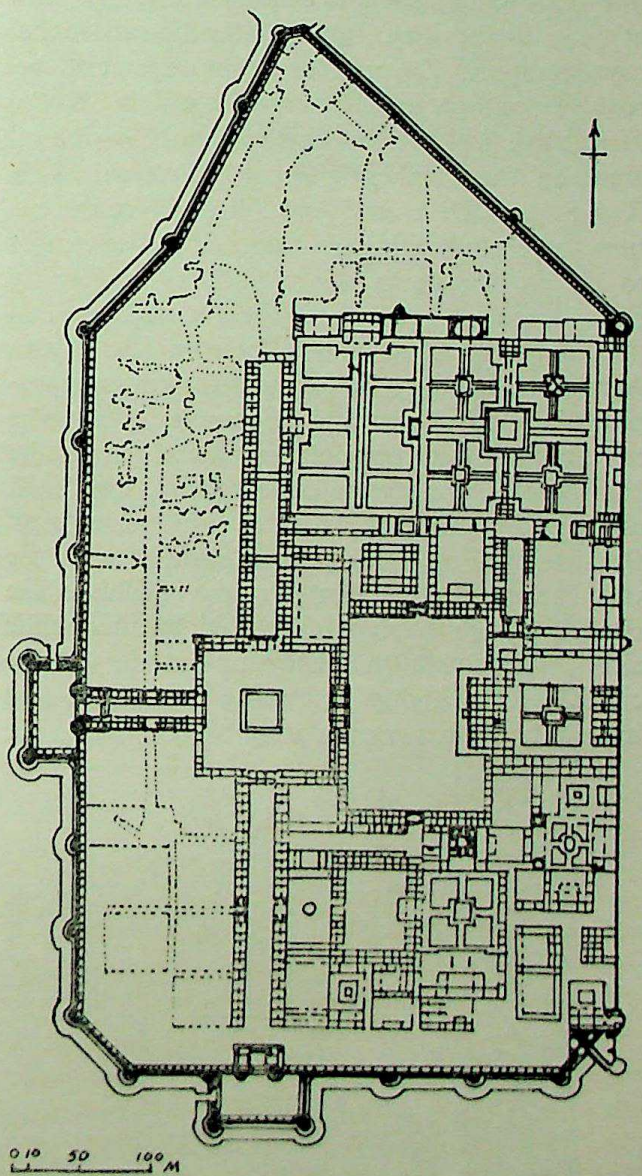
56. *Red Fort, Delhi.*



cloisters as the security guard chambers for the palace-complex within, which itself was built at a higher-terrace and had a northern and southern gateway the former connecting it with Jami Masjid basement and all the structural scheme which lay further north upto the return of the citadel wall, the valley beyond which divided the (later) Shahjehanabad walls and the Kotla walls. At this point, originally was a ford for crossing the river by boat. This was the point where Timur, after conquering Delhi and inspecting the Firozian Kotla buildings (including Jami Masjid), had crossed the Jamuna, for his tran-Jamuna village camp.

It is worth noting that Firoz Shah had such advanced ideas on planning his citadel, with private and public zones well isolated in such a compact way; functionally well differentiated and securely provided for safety-ideas which had enthused the Mughals only two centuries later. For instance, we have already shown that, except for the short-lived Kilughari (modern Kilokri), Firoz Shah's citadel and city was the first to be provided with a truly riparian setting. Again, as in the Mughal Red Fort at Delhi (fig. 56) and Agra, so in Kotla citadel (see fig. 13), the inner palace apartments of the king were not only situated on the river side circuit, but also have been built on a raised terrace in such a way that the roofs of the palace would be seen well above the rampart level, especially to provide unfettered river view—which was the very purpose of their special location. Again, like the Mughals, at Agra as well at Delhi, the hall of public audience (*Diwan-i-Am* of the Mughals) at Kotla was located closest to the main entrance into the citadel in the immediate quadrangle, while the *Diwan-i-khas* or special audience hall was probably just outside the main inner entrance of the quadrangular gate

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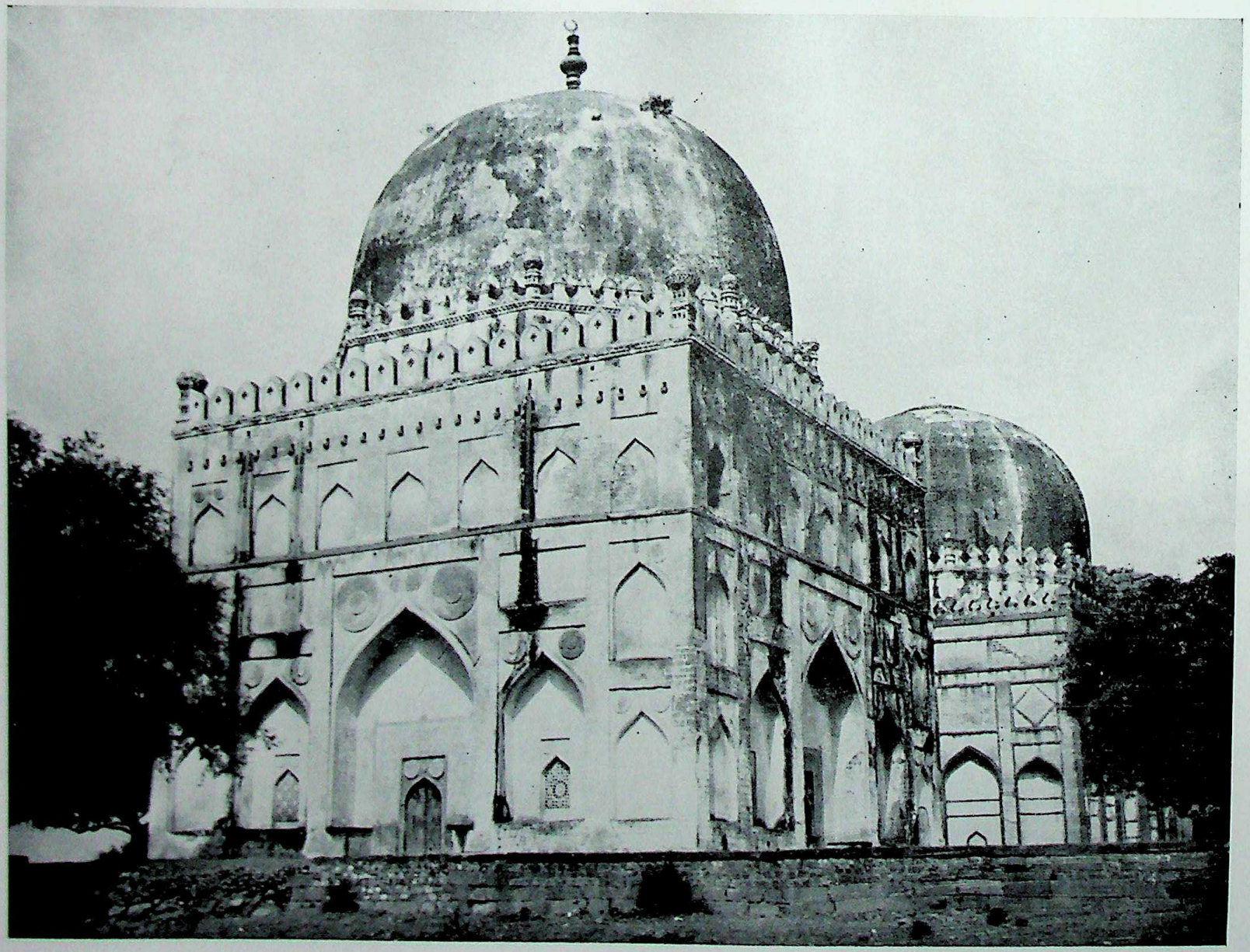
of the palace-complex and facing north. Again, like the Agra and Delhi citadels, the Jami mosque in Firoz's Kotla, also was placed sufficiently near at hand to the king, but specifically *outside* the royal complex. The area for the movement of the royal entourage and other officials in Kotla Firuz Shah has the same conventional devision of area, on the northern part of the citadel as in Red Fort in Delhi and Agra. Thus, Firoz was a trend-setter, in keeping the hall of audience closest to the main gate of his citadel, as in keeping riverside palace roof above the fort wall level, as the Moghuls did so much later in Delhi and Agra. The southern half of the Kotla was appropriated by royal apartments complex, while the northern half was for public or official use in the Jami Masjid, the pyramidal structure, the Baoli and pavilion near by, besides other structures. But there was no north gate, as such, thus its use was also essentially affiliated to the officials of the citadel, though overlappingly used by the public also. The rough parallelogram-outline of the citadel itself is highly innovative for his age and indeed had been rarely adopted elsewhere, but was clearly an indigenous preference, right from the Harappan times, although a bow-shape, that of a major sector of a circle type, were equally common earlier. This was also seen repeated in the case of Delhi Red Fort and to some extent at Agra Red Fort. The regularity of Firoz's methodical partitioning of the citadel area and a prevailing linear rhythm can be closely compared to that in Mughal Red Fort, Delhi and would bespeak an orderly mind. That, above all, he was able to designate his city, *entirely without rampart walls*, is already a distinctively modern achievement in that medievel age. With the skirting ridge covered by a potential hunting jungle, provided with *shikargahs* and other suitable resting places, with the city sprawling amidst well-ordered throughfares from Hauz Khas to the Turkman Gate area, and with a very effective supervision and maintenance of most of the public facilities and structures, even including those of previous Sultans, right from Iltutmish down to his times, Firoz was most decidedly *avant garde*, a visionary, far ahead of his age in acquisitions and ability.

60. Tomb of Ahmed Shah Wali Bahmani, Ashtur.



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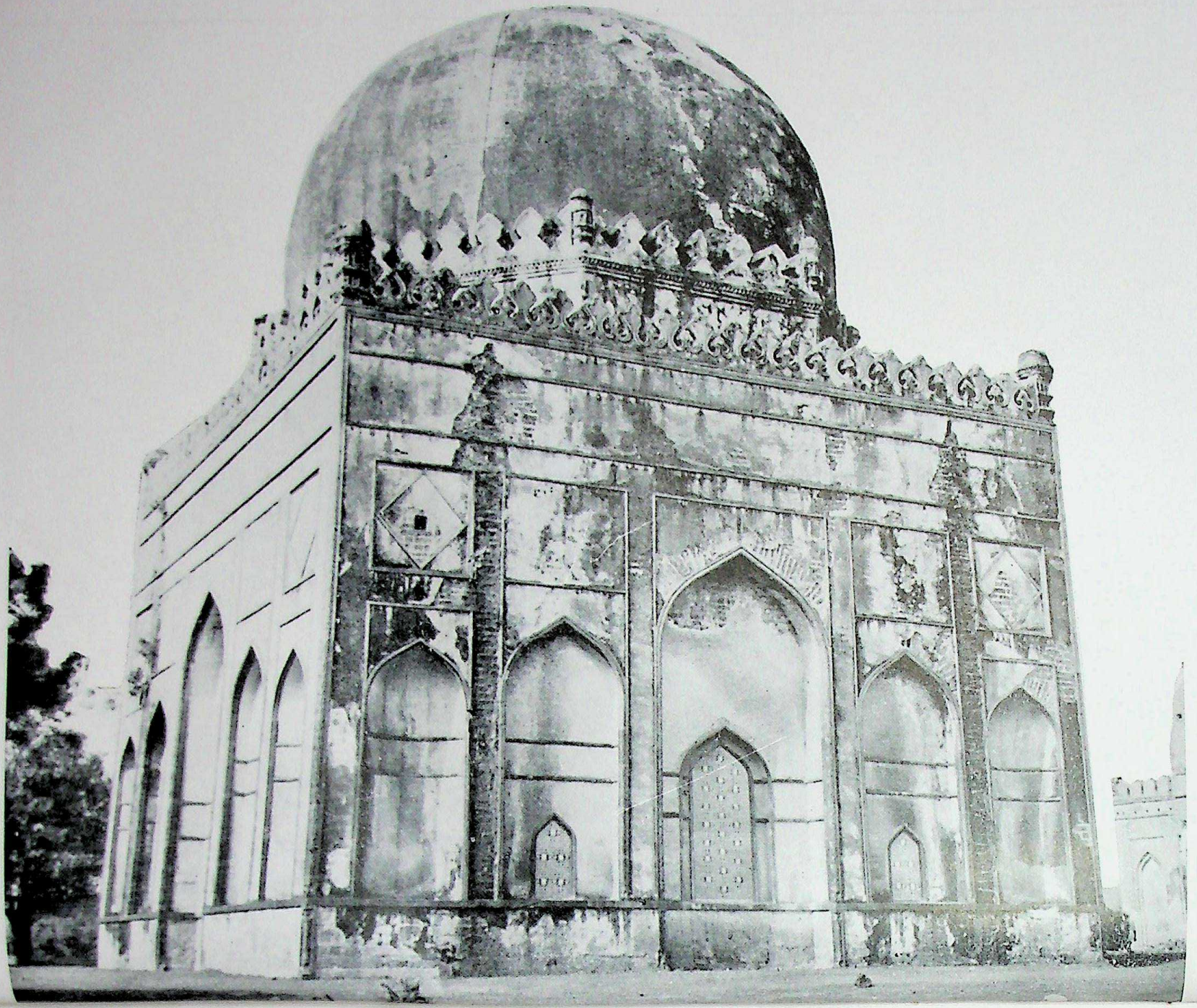
59. Ahmad Shahwali Bahmani Tomb, Ashtur.



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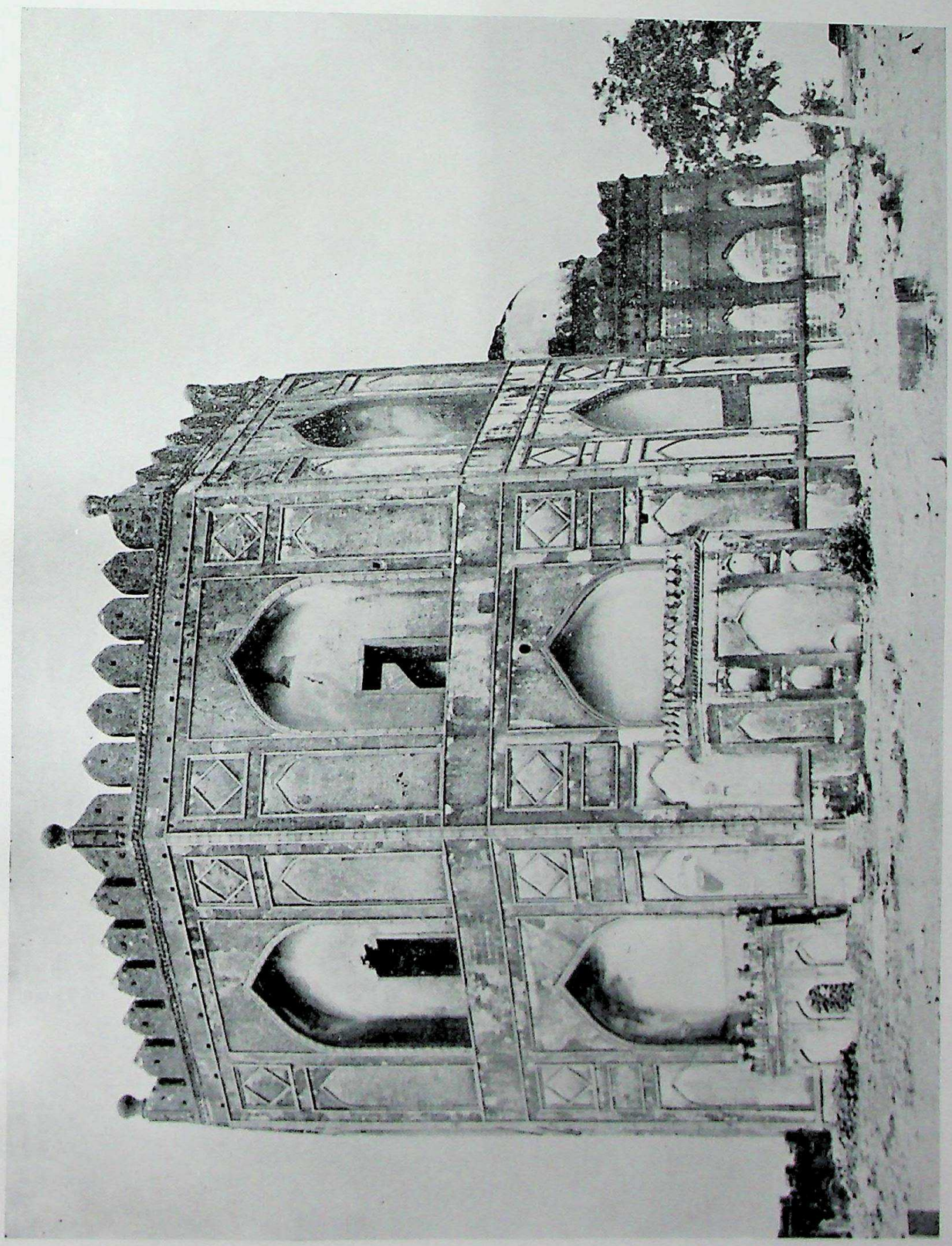

61. Mausoleum of Shah Khalilullah, Gulbarga.

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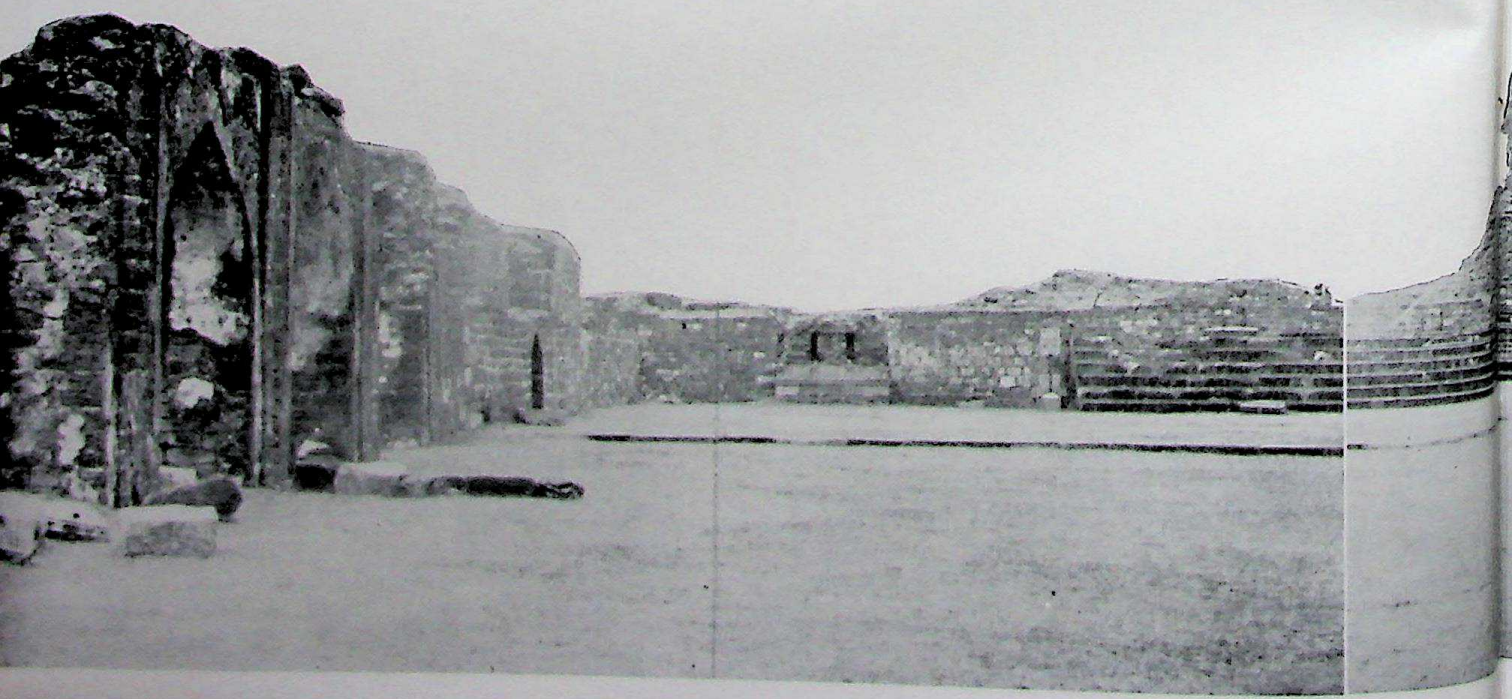
62. Tarkash Mahal at Bidar.



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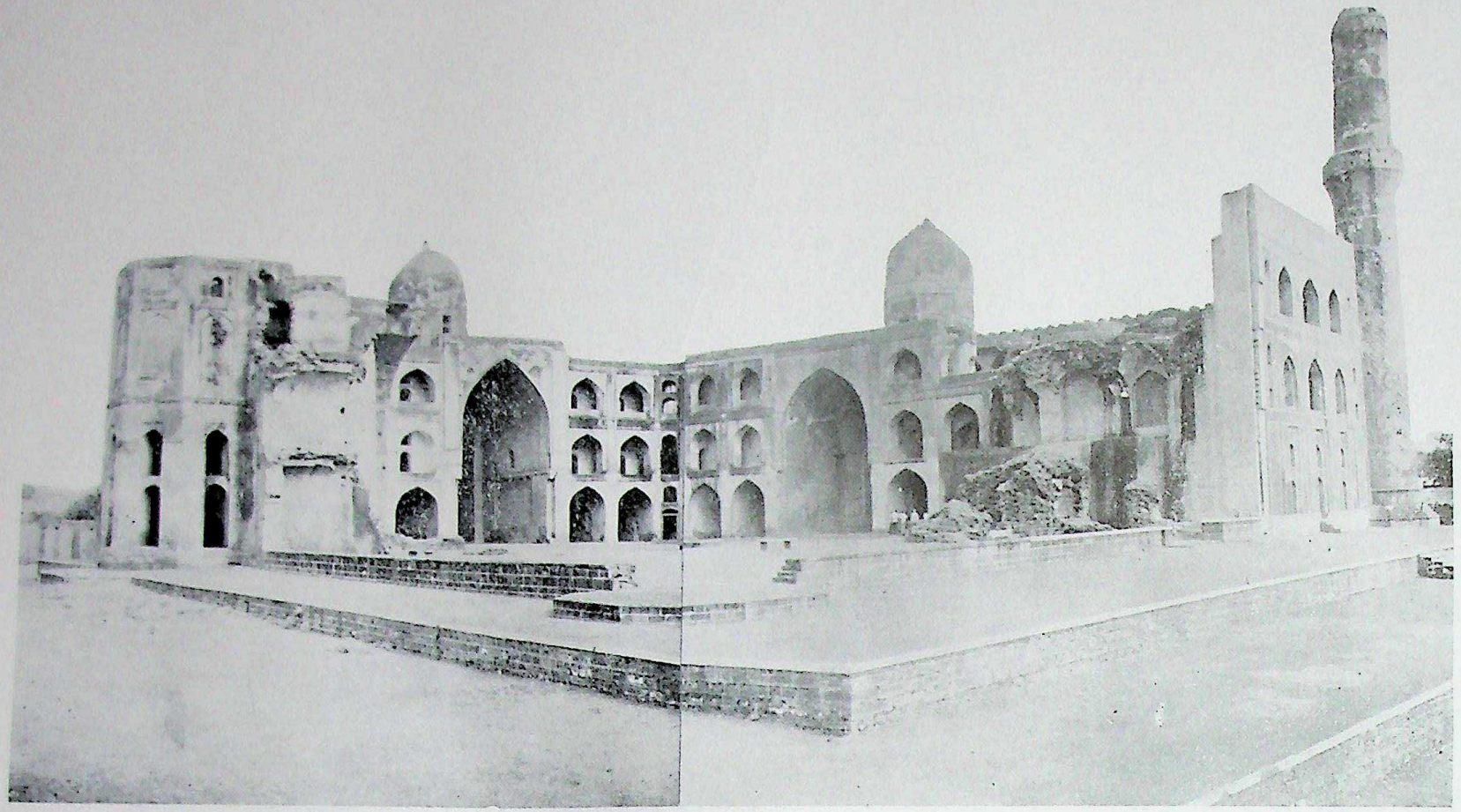
63. Panorama of (Diwan-i-Khas) Takht Mahal and Diwan-i-Am Courtyard, Bidar.

64. Madrasa of Mohammad Gawan at Bidar,



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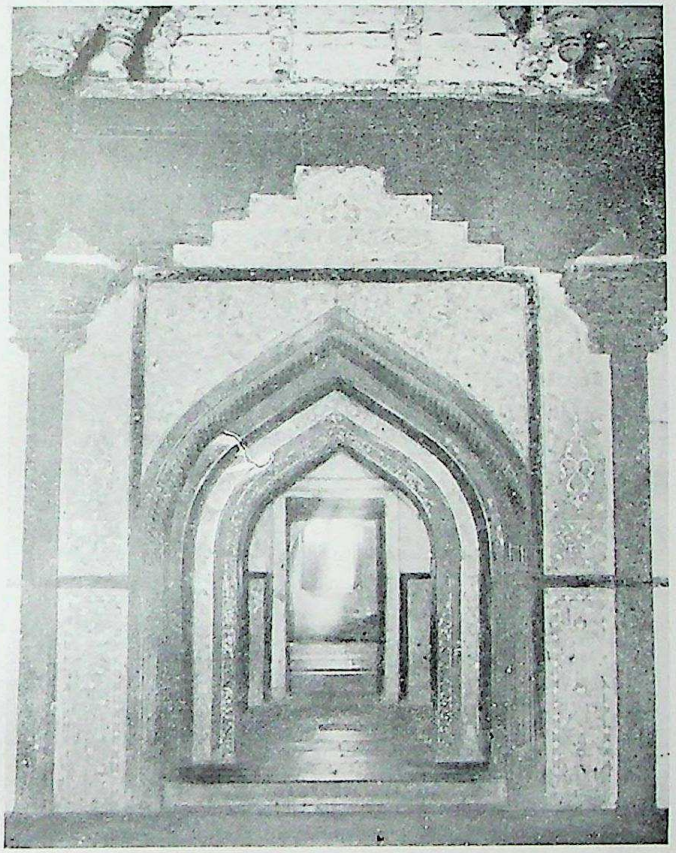

65. Rangin Mahal.

66. Jami Masid Burhanpur.

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67. Nizamuddin Maqbara, Chanderi.

68. Bada Madrasa, Chanderi.

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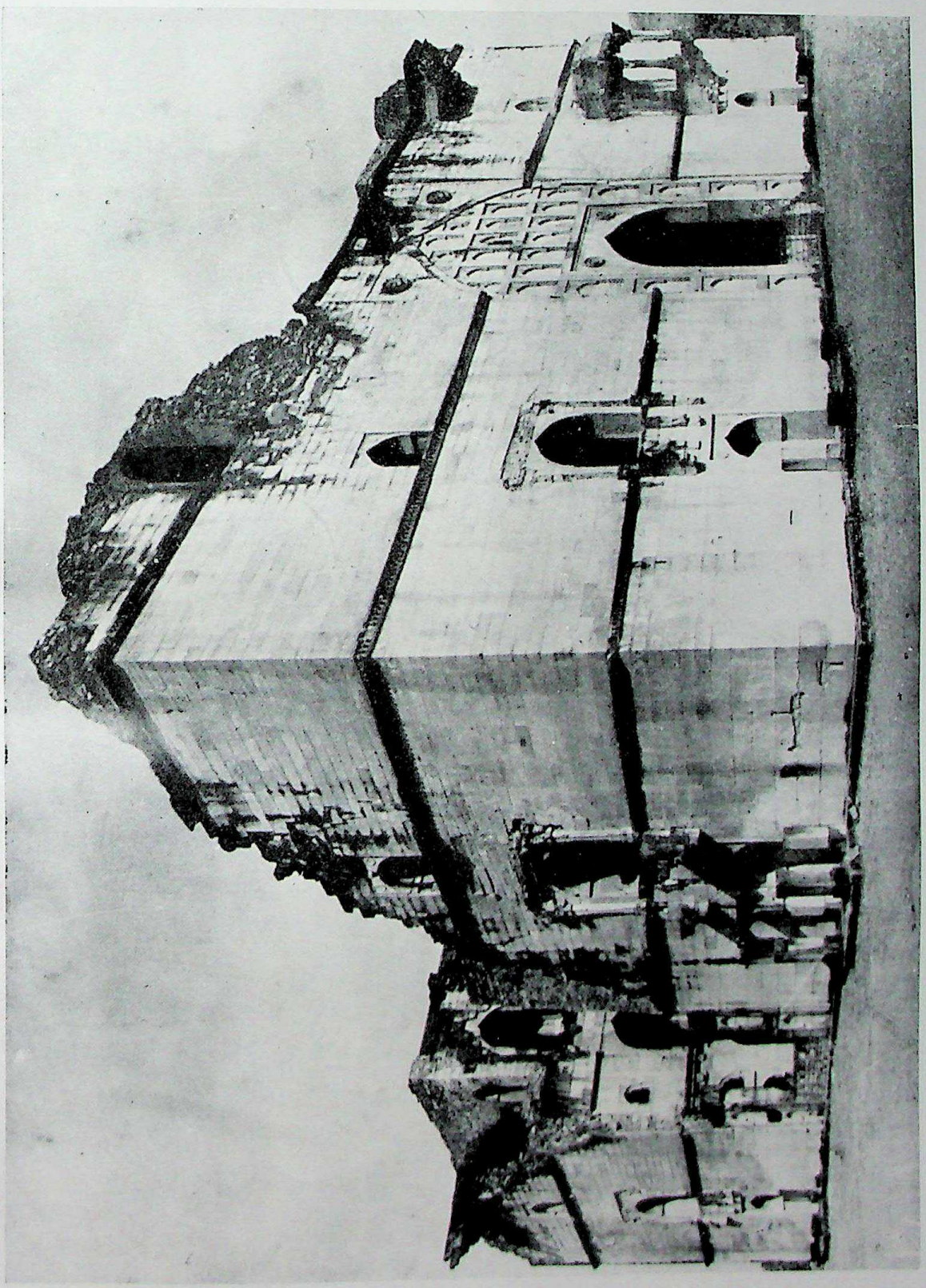

69. Koshak Mahal, Chanderi.

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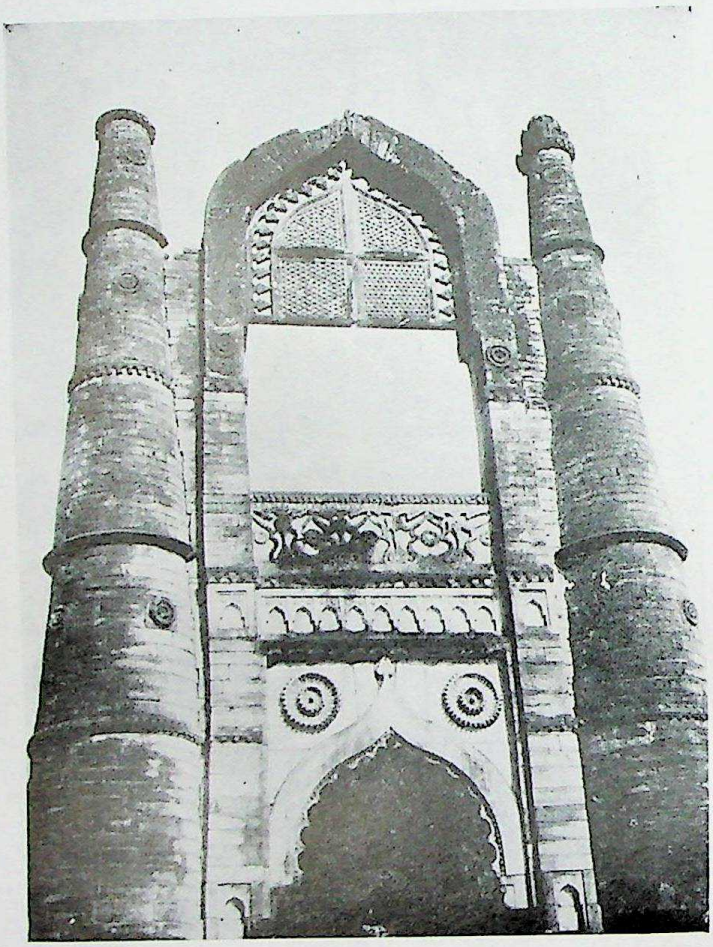
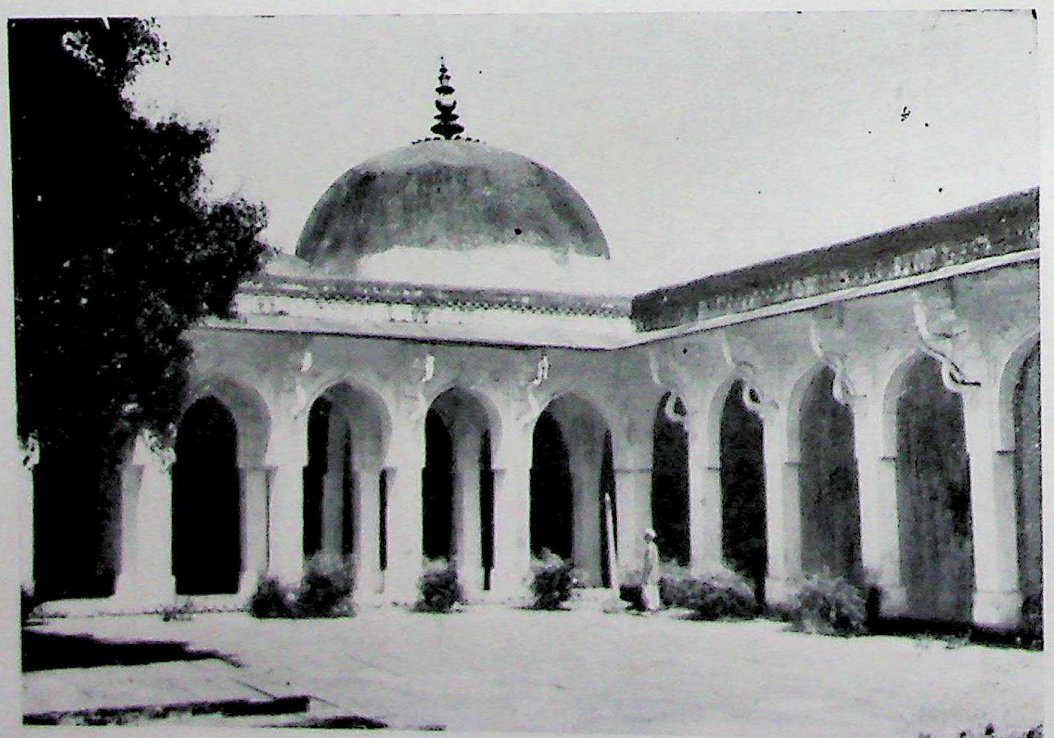
70. Badal Mahal, Chanderi.

71. Jami Masjid, Chanderi





72. Hauz Khas and its Tughlaq monuments.

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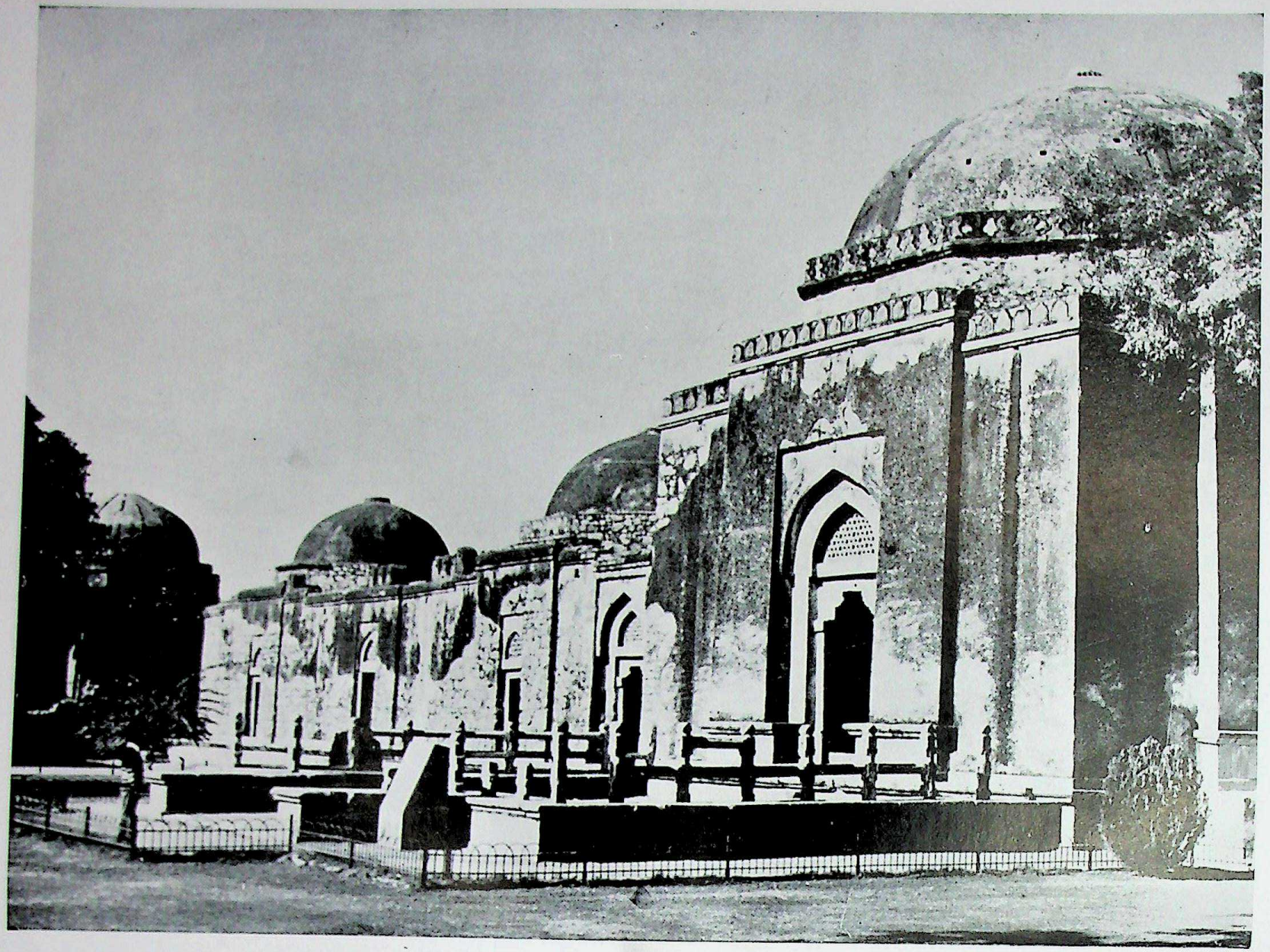
73. Mausoleum of Firuz Shah Taughlaq at Hauz Khas.



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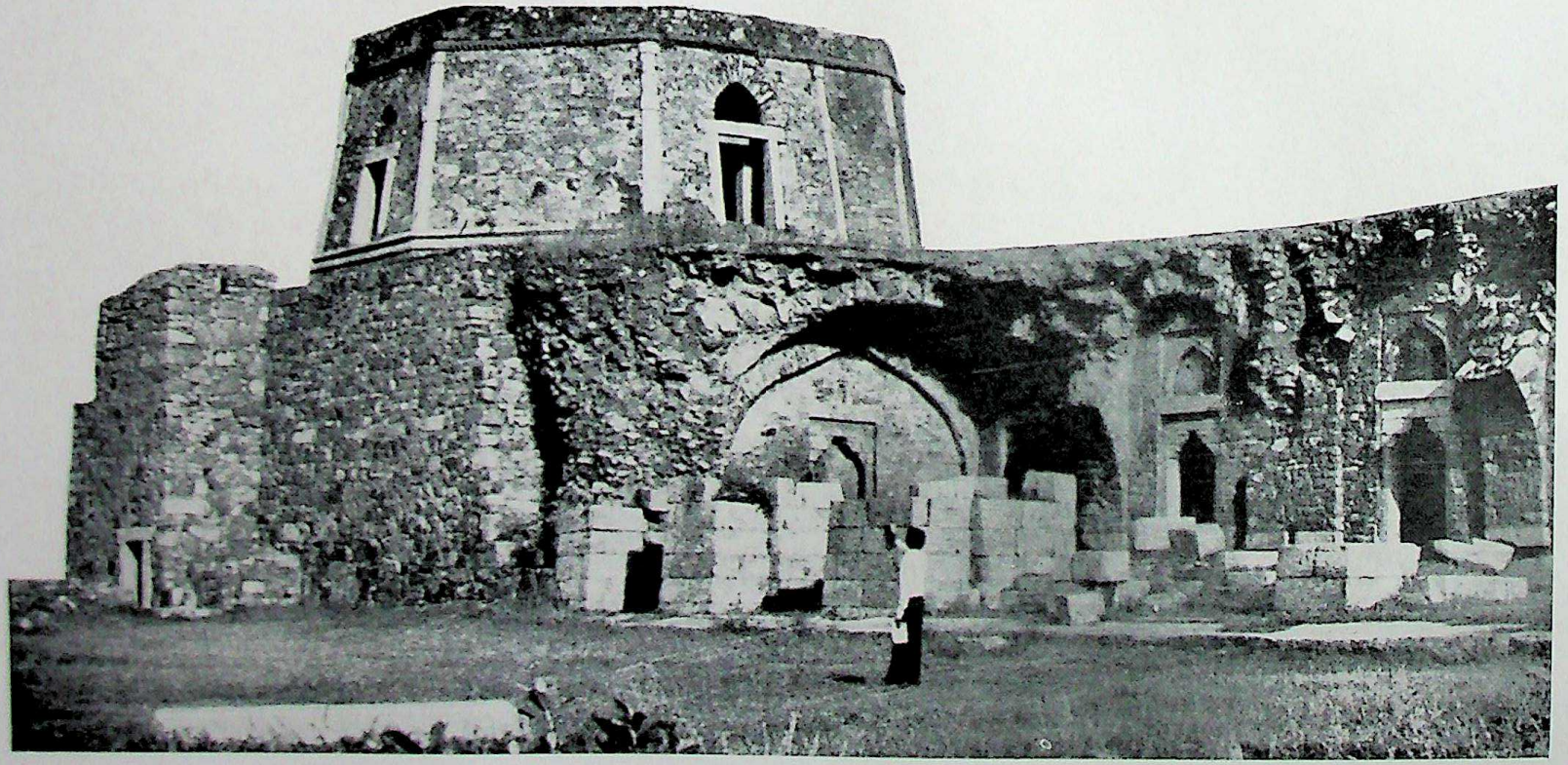
74a. Bijaymandal complex of Khilji-Tughlaq stages.



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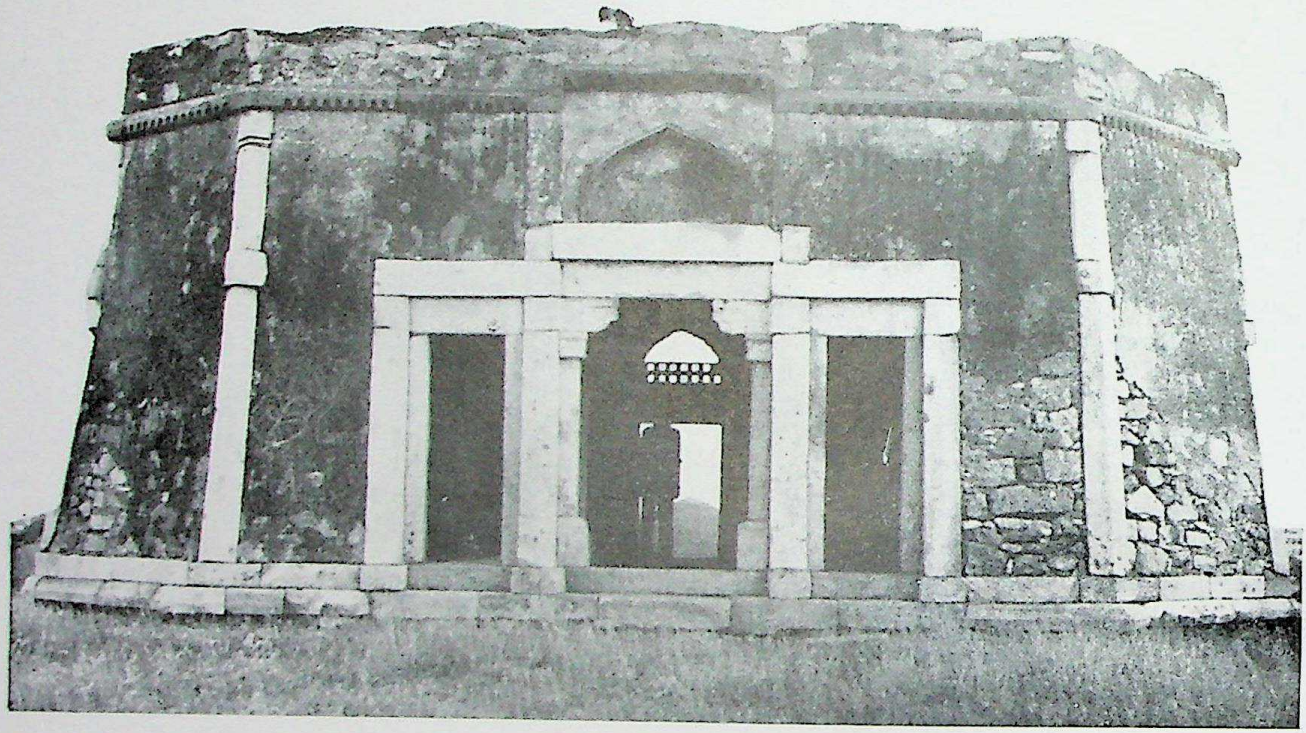
74b. *Baradari* on the top of Bijaymandal, Mohammad Tughlaq stage.

74c. Tomb type in Bijayamandal, lower ground level-Khilji stage.



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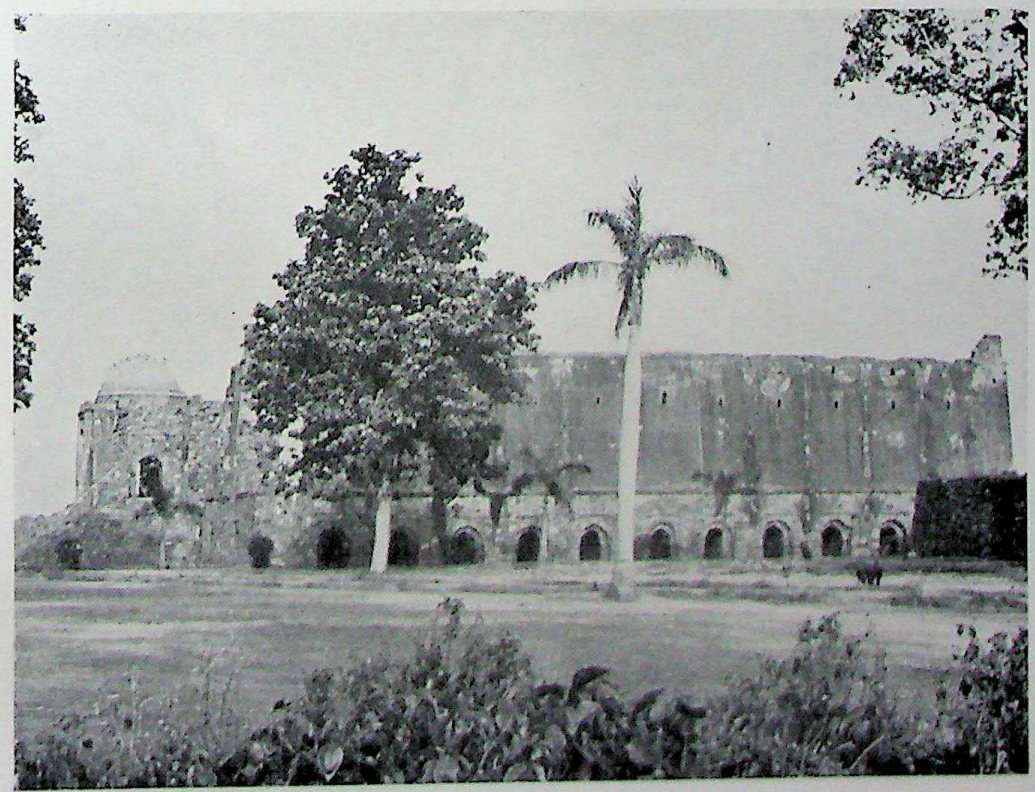
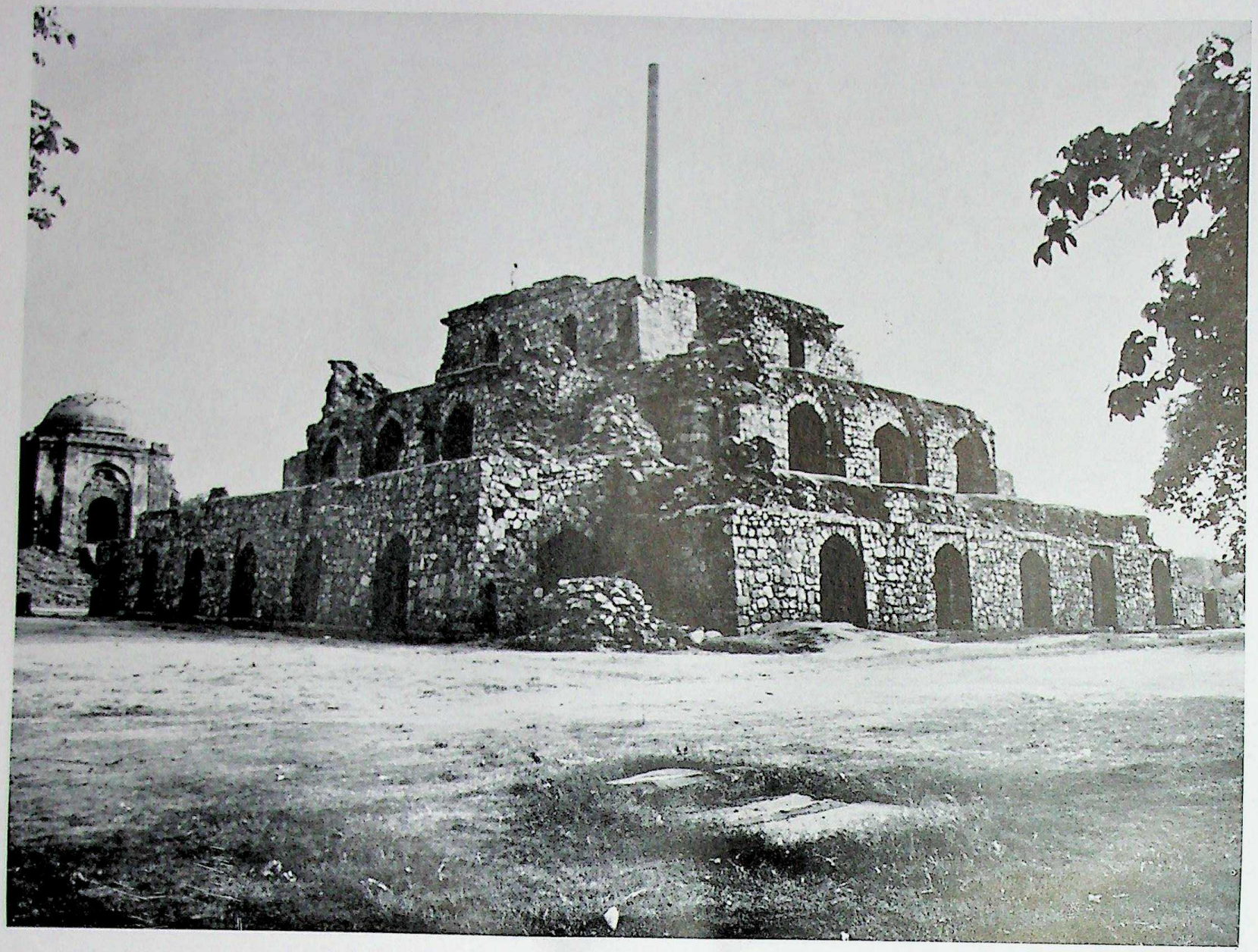
75a. Jami Masjid at Kotla Firuz Shah, cellular passage on back wall of sanctuary for *zenana* movement.

75b. Jami Masjid at Kotla Firuz Shah, rear view.



75c. Asokan *lat* erected pyramidal storeyed structure by Firoz Shah at Kotla Firoz Shah.



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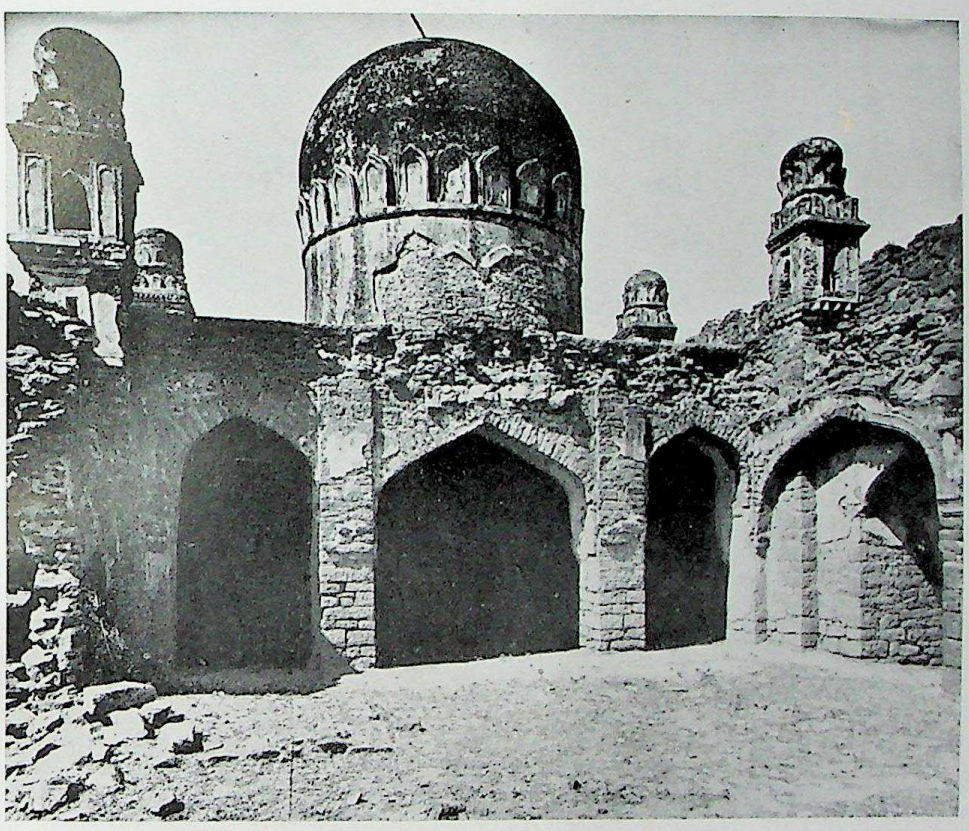
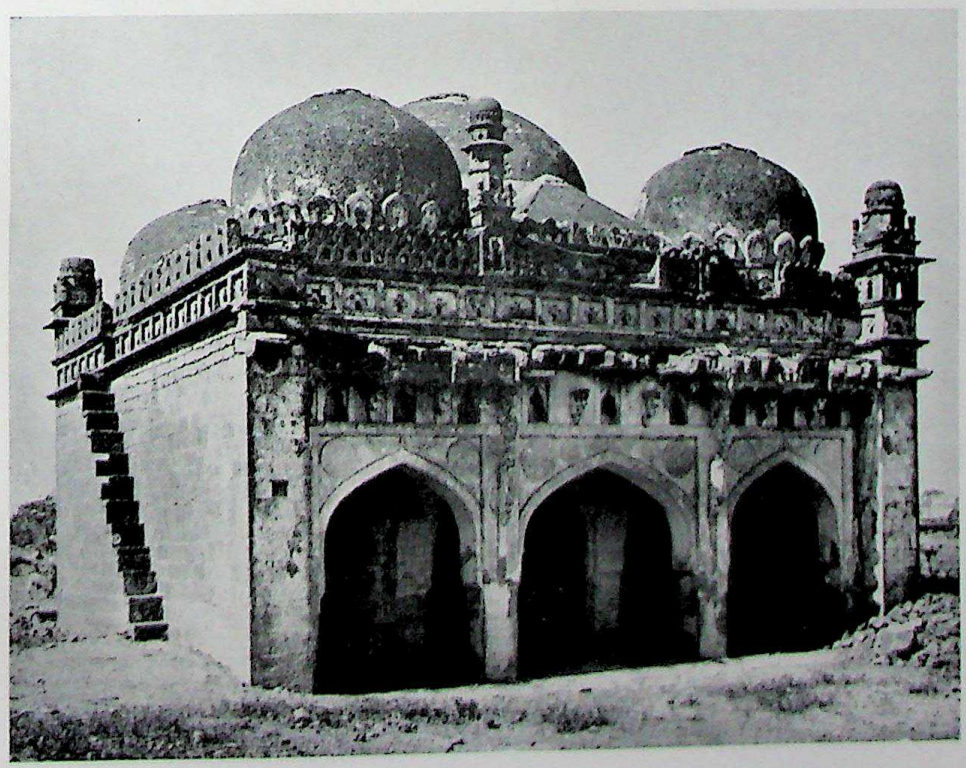
76. Yusuf's old Jami Masjid (1512 A.D.)

77. Nava Gumbad, Bijapur (1556 A.D.)



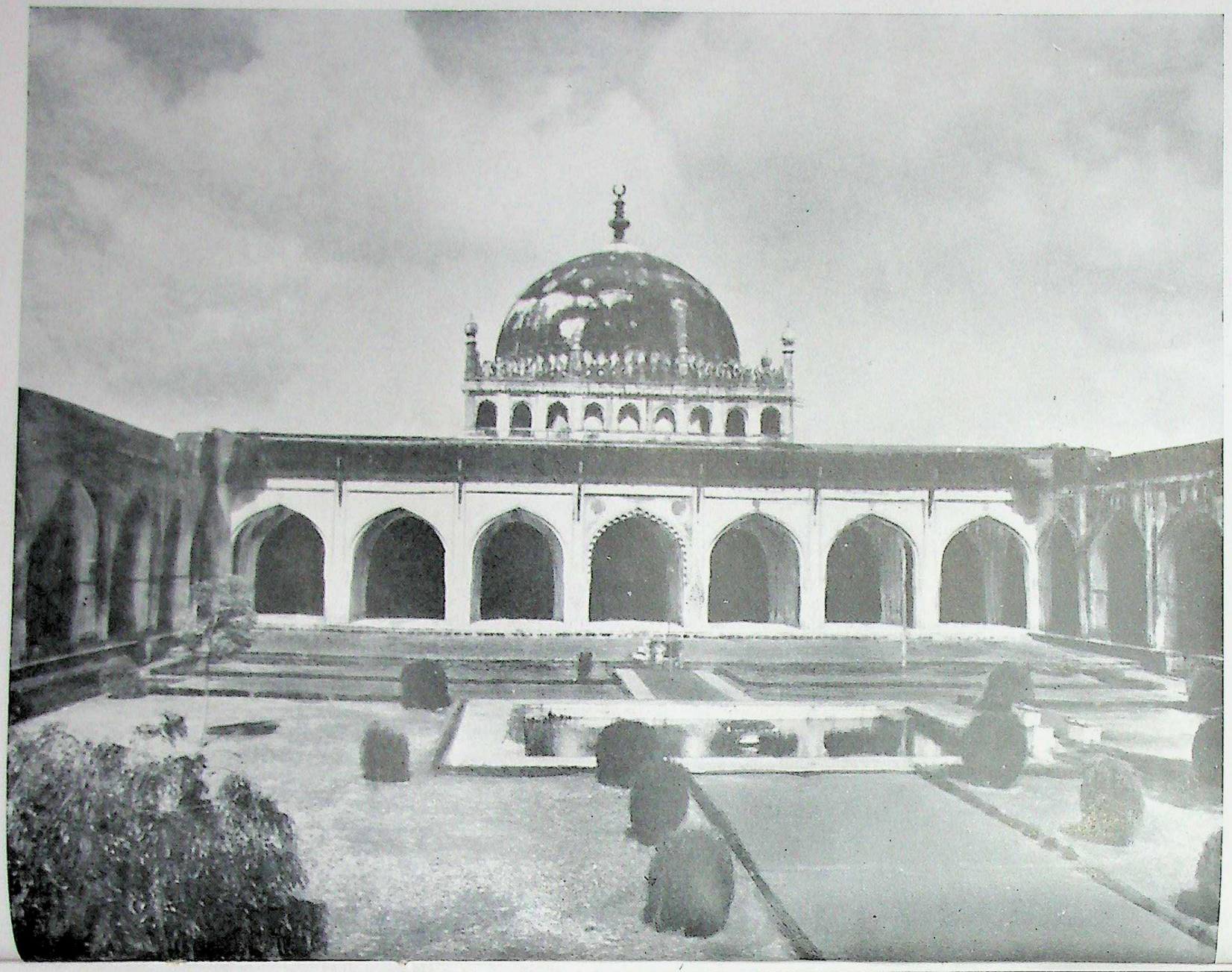


78. Jami Masjid, Bijapur.

78a. Interior details of Jami Masjid, Bijapur.→

79. Mihtar Mahal, Bijapur.→

80. Water pavillion in Ar Qila, Bijapur.→



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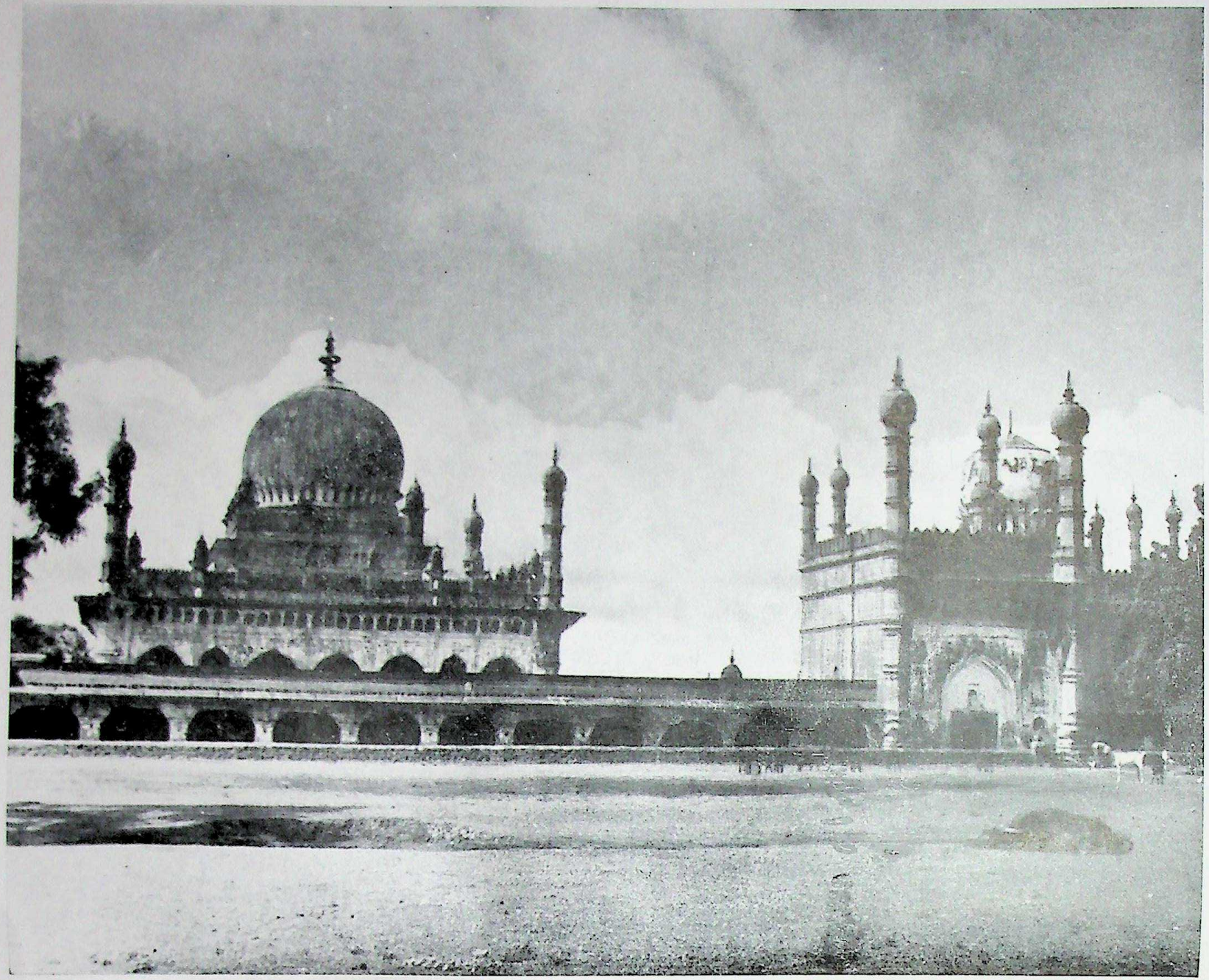
81. Ibrahim Rauza, Bijapur.



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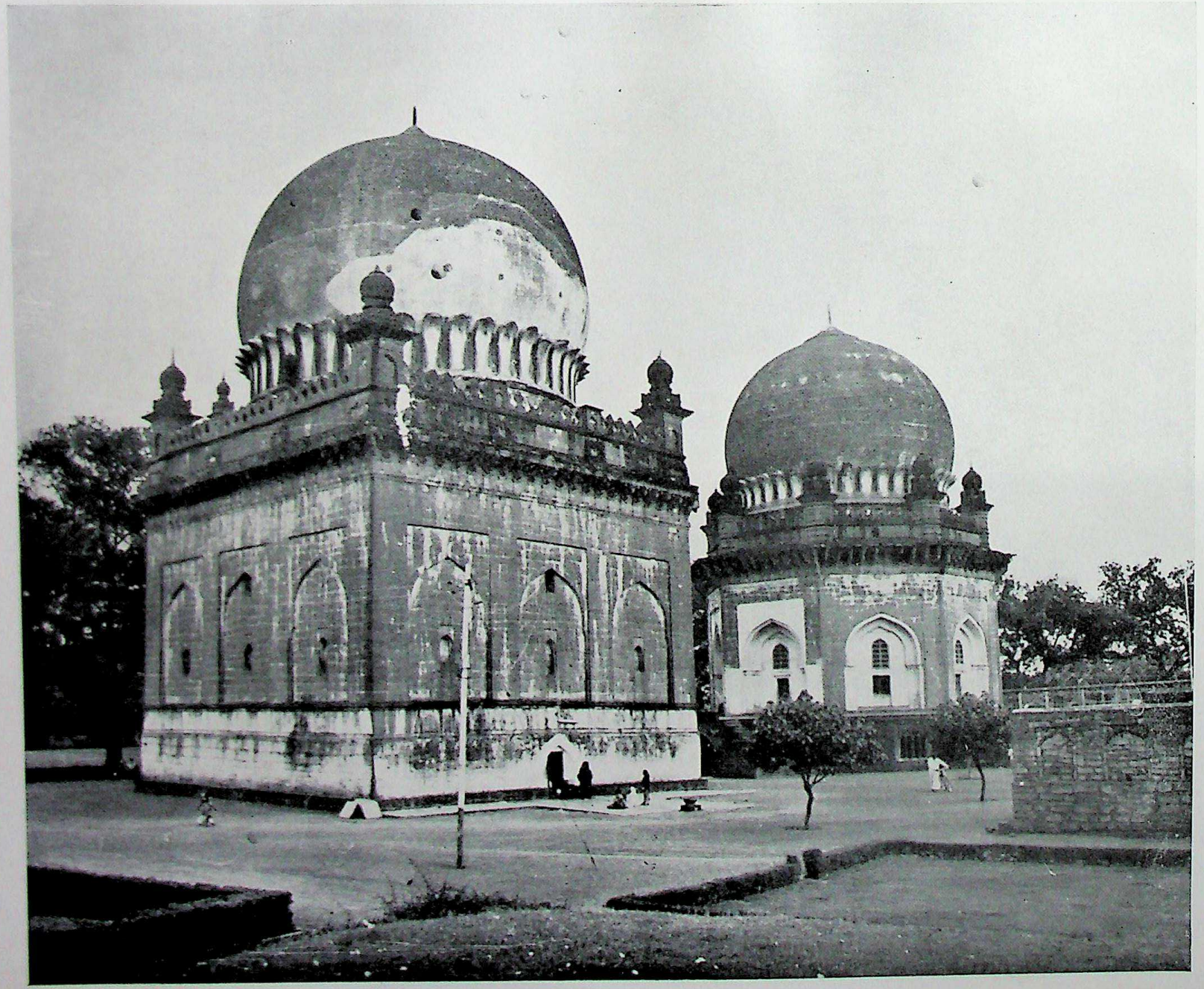
82. Jool Gumbad, Bijapur.



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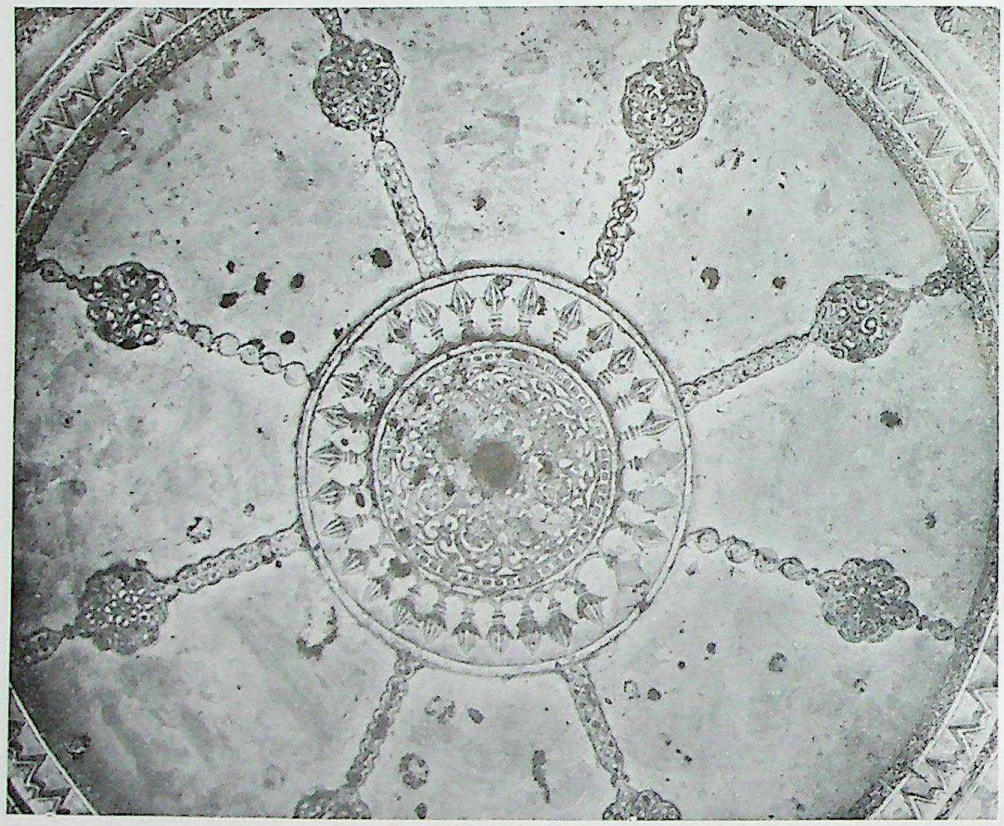
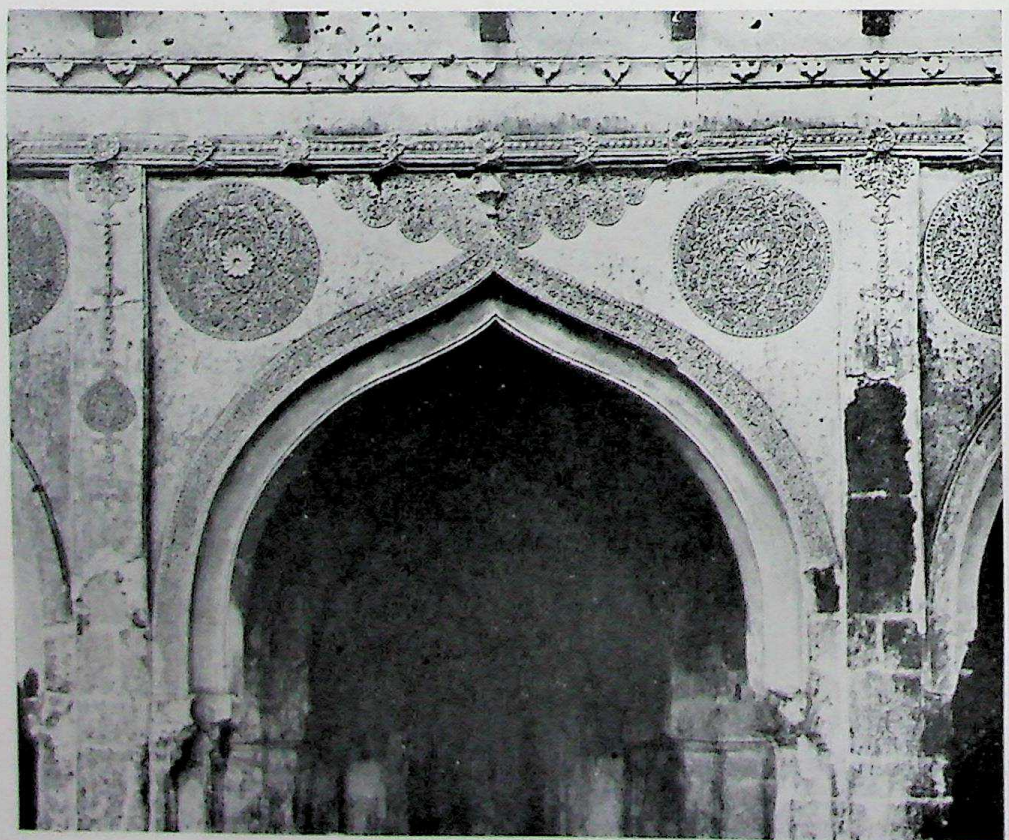
83. *Interlacing*, Bijapur style (Anand Mulji mosque-1559)

84. Medallions, Bijapur style.





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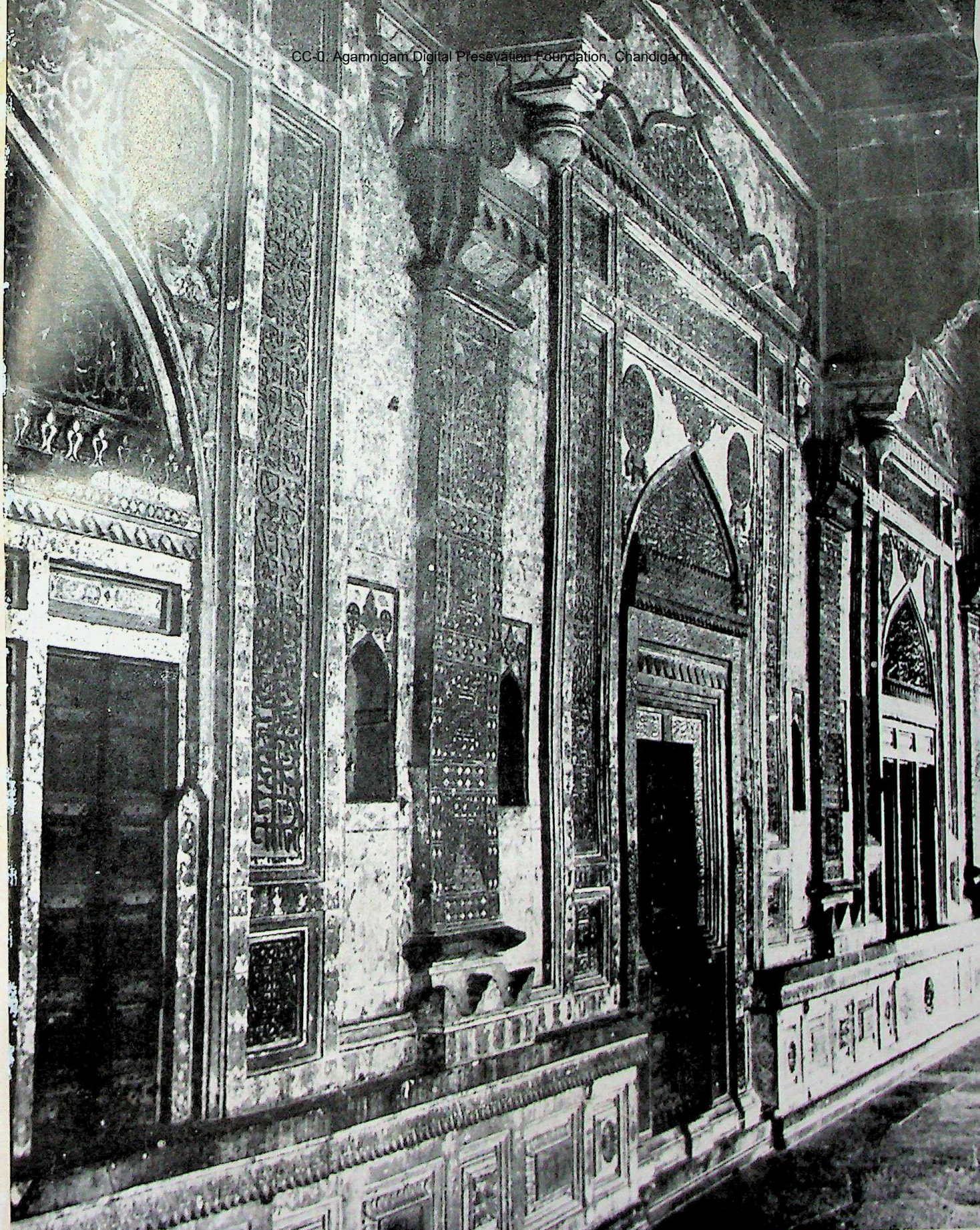
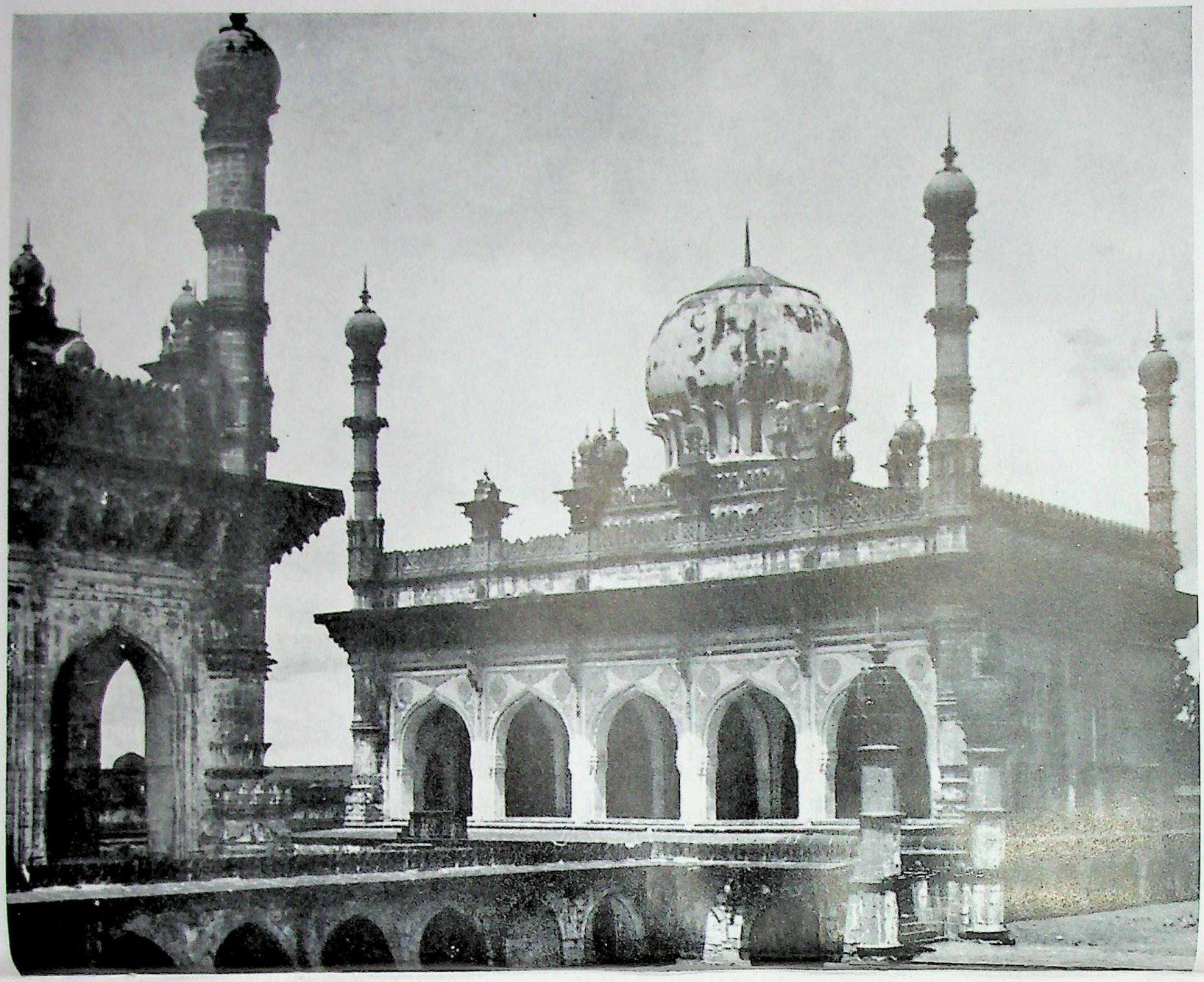


85. Interior artistry of *mihrab*, developed Bijapur style (Ibrahim Rauza).

86. Mosque of Ibrahim Rauza, Bijapur.



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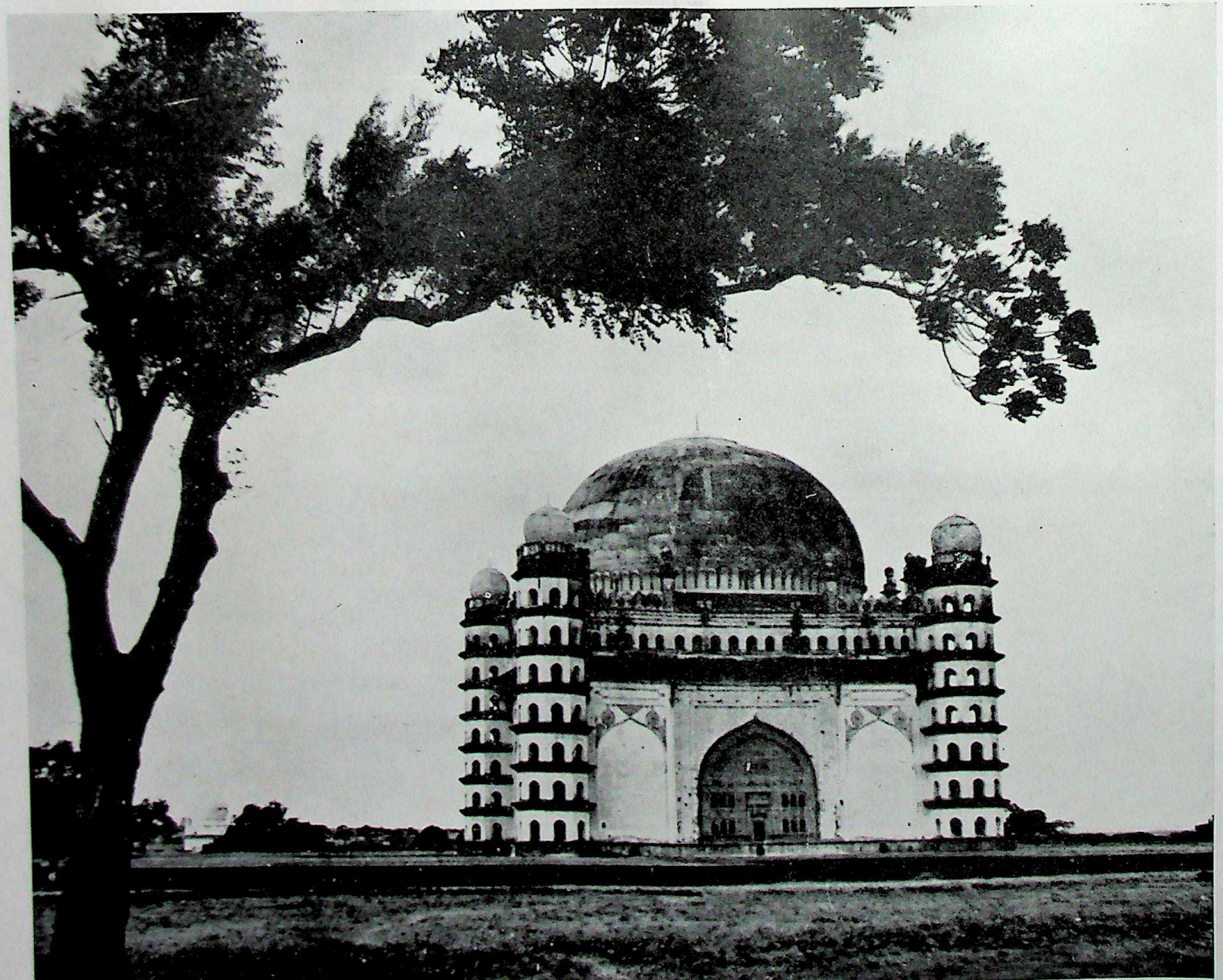
87. Gol Gumbad, Bijapur.

88. Bracket design at Gol Gumbed, Bijapur.→



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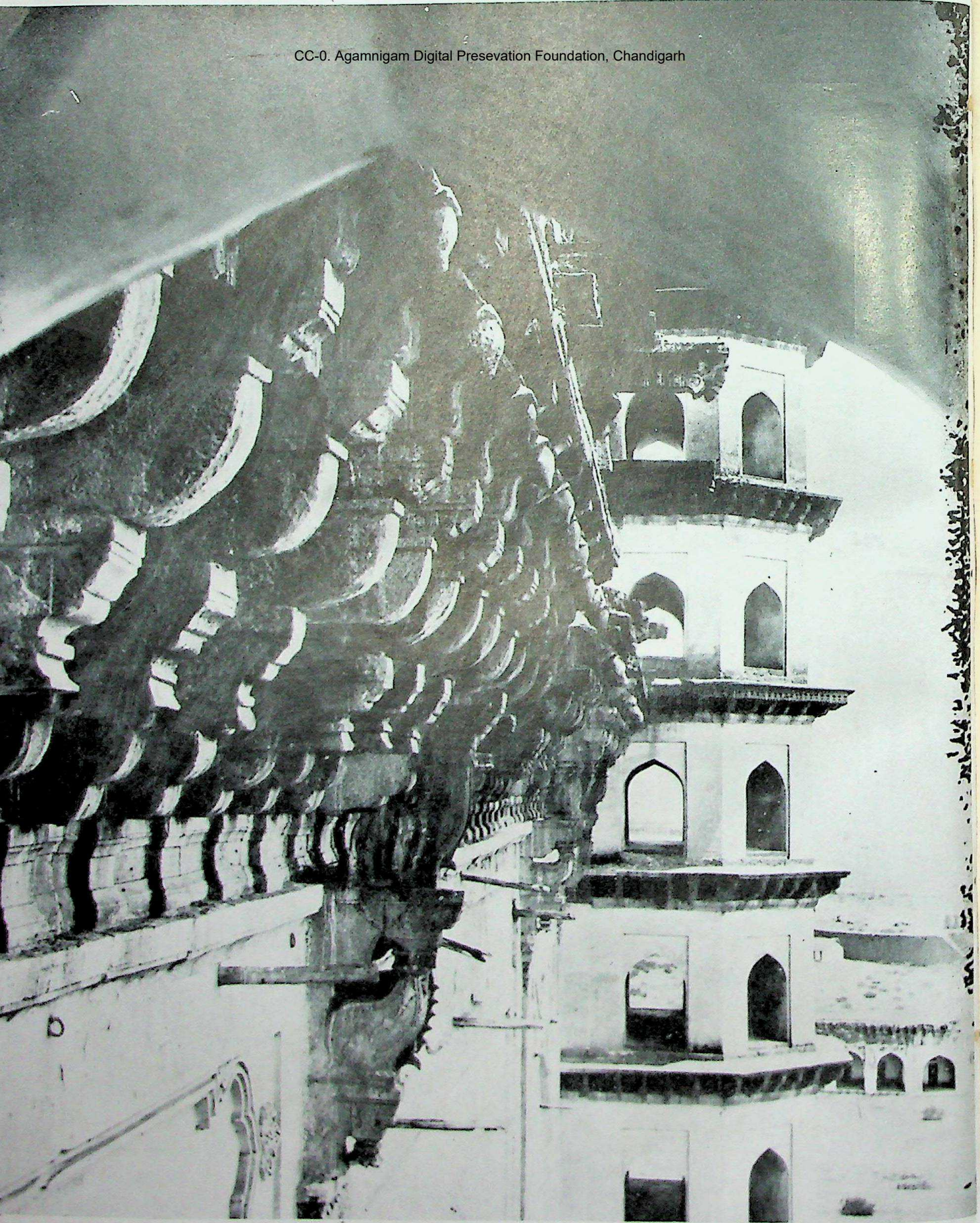

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Six

Structural setting in Deccan and Upper India

In the 16th century, the Deccani Kingdoms of Bijapur, Ahmadnagar, Golkonda and Berar (Vidarbha) virtually divided the area—essentially the western and central parts of the Deccan, into four almost equal parts. The result was that Bijapur and Ahmadnagar became littoral kingdoms, and the other two inland empires. Consequently, the former two had also direct access with Gujarat and the West Asian centres by maritime links, while the latter two had to develop direct links with Upper India, or through the former two to the overland outside world. However, as Vidarbha had been somewhat of a region of isolation, as already explained elsewhere, it was not in a position to transmit effectively the impulses, which certainly it may have absorbed from time to time. Golkonda empire, therefore, sought its impacts, by proxy, primarily through Bijapur and had developed a common base with it for cultural and architectural development, while Ahmadnagar and Vidarbha similarly became a combined unit for general contacts. Hence, Bijapur and Golkonda architectural developments went hand in hand and are more comparable mutually, both in time and space. Correspondingly, a comparison is also possible between Bijapur and Ahmadnagar art styles and of the latter, with the Imadshahi sub-styles seen in Khandesh.

The Jami Masjid at Chanderi, the Bada *madrasa*, Shahzadi-ka-Rauza and the rather early arched Katighati Gate (partly hewn out of rock) are all important earlier architectural specimens at this place, prior to the Mughals, while the Koshak Mahal and the Badal Mahal gate of Chanderi are outstanding residential palace example and freestanding lofty gate type respectively of the Mughal times. The former of the last two, as already mentioned elsewhere, has the typical brackets relatable to Fatehpur Sikri and Agra (figs. 57-61). The Bibi Sahib's masjid at Burhanpur is again an example of Gujarat influence in Khandesh (fig. 62).

The existance of the dense hilly Gondwana forested country between Golkonda kingdom and Bengal-Bihar had also been a determinant factor, and Orissa area got, therefore, a direct link with Golkonda. It is in such a geo-cultural circumstance that the Vijayanagara kingdom was able to carry its invasions through the Bahmani (Bidar Kingdom) tract-which was a predecesor to the Qutb Shahi rule in Golkonda area—upto Orissa, virtually resulting later in the strengthening of the Golkonda rule to counteract and thwart such future thrusts. Khandesh similarly became sandwiched between Gujarat and Malwa on the one hand and Vidarbha and Ahmadnagar, on the other, becoming a zone of virtual isolation where a polyglot or mixed local style prevailed essentially, stimulated only occasionally by external influences in art. After the Imperial Tughlaq rule

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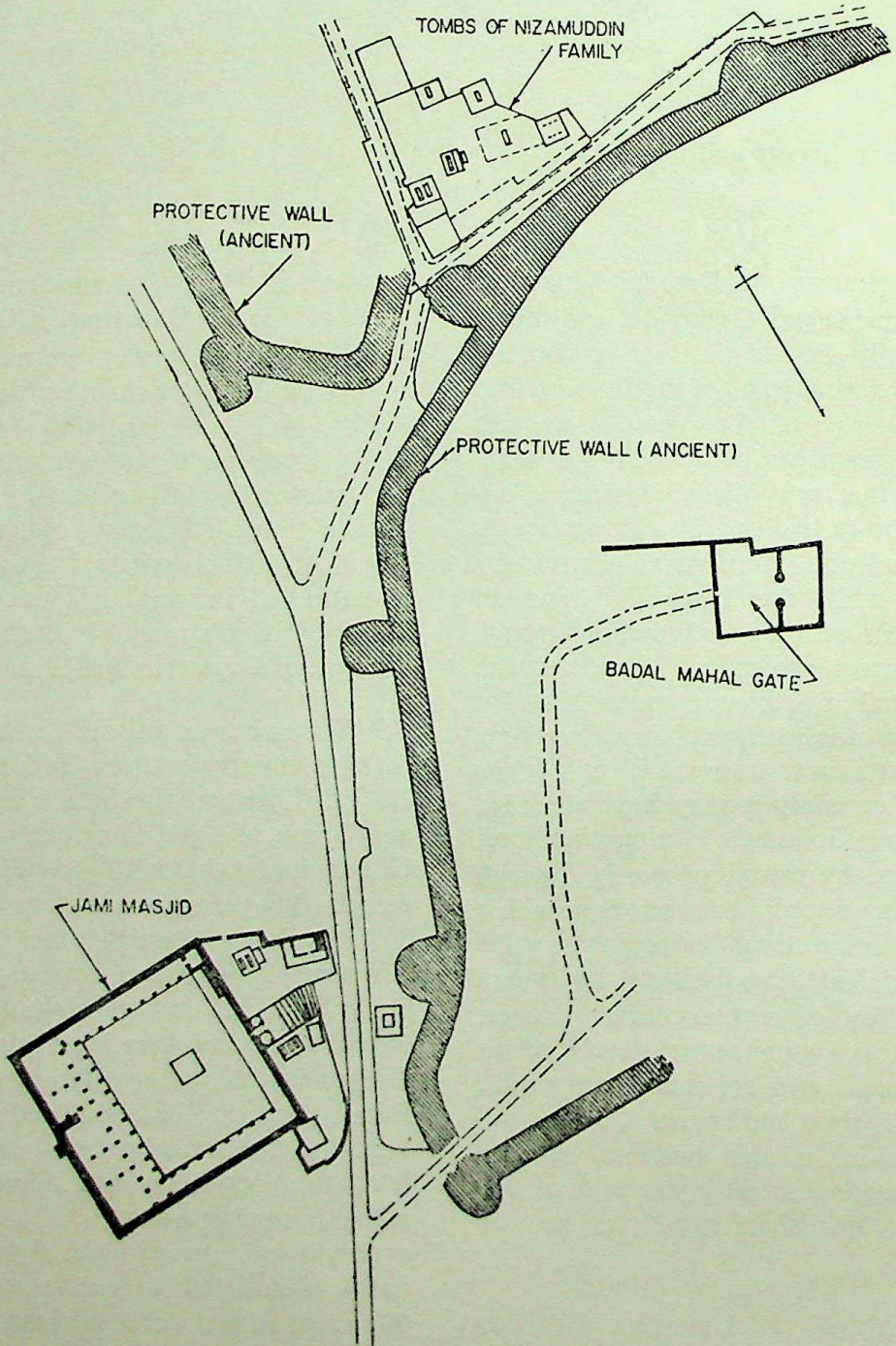
57. Jami Masjid, Badal Mahal and other monuments at Chanderi, plan.



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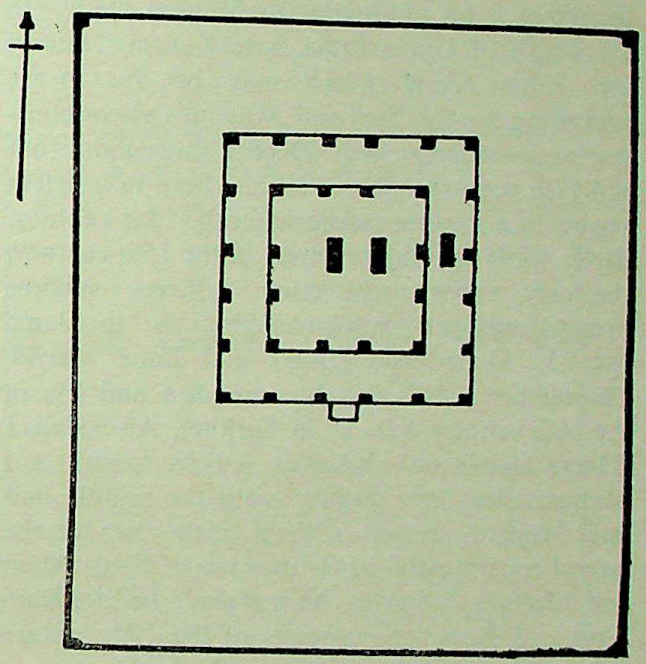
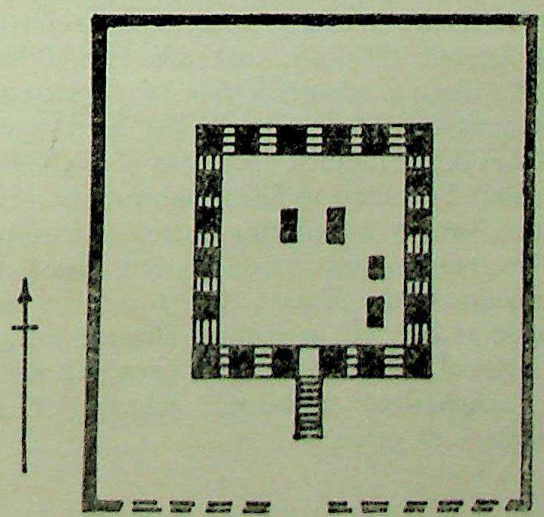
58. *Bada Madrasa, Chanderi, plan.*
59. *Shahzadi-Ka-Rauza, Chanderi, plan.*





ended at Delhi in the beginning of the 15th century, Jaunpur, Bihar and Bengal also primarily receded into their own native shell, in the face of Afghan-Suri influences expanding within Bihar and Bengal, which was helped in this way.

It is only from the time of Humayun that we find a meaningful link again established between Imperial Delhi zone (which was essentially tending to spread till then its influence in West and northe-west upto Kashmir), resulting in Afghan-Suri styles gradually shedding their indigenous features and falling more in line with a unified Upper Indian Imperial style. The Jami Masjid at Jaunpur is the first to receive this effect (1470) when the propylon gets unified into the *arch screen* in one rectangular mass, with the miniature arches on the jambs being repeated on the tympanum space of the inner arch and below, slowly leading to the developments like the later *Buland Darwaza* type of the Mughal architecture. Further, the *minar* architecture ceases to have any special utilization in the Jaunpur style, after it has been merged with the Mughal empire, and thus we have *minar* architectural use flourishing only in Gujarat, Khandesh and Deccan.Neither Bengal/Bihar nor the Mughal architecture, upto the time of Akbar's Sikandra tomb (1612-13) involves any meaningful use of lofty and slender *minars* but has more use of *chattris* and flat rectangular domes. This is course in tune with the emphasis on horizontal lines Mughal style (Shah-dera at Lahore—1626) introduced. It is from Jehangir and Shahjehan's Jami Masjid, Delhi (1644), Wazir Khan's mosque Lahore (1634), Taj Mahal (1634), that *minars* are again pressed into service in architectural layout. Thus, it is appropriate to consider *minar* archi-

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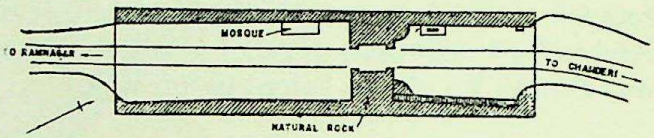
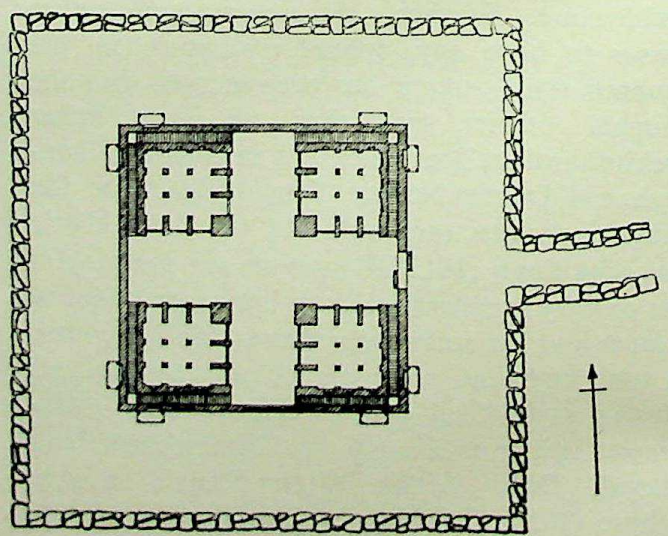
60. *Kati Ghati Gate, Chanderi, Plan.*
61. *Koshak Mahal, Chanderi.*

tecture as a gift of Gujarat to Mughal Delhi. In the whole of Upper India, upto Kashmir, *minars* are seldom found—which may be due to the prevailing Lodhi, Suri and Mughal style of constructions—whereas in the Deccan throughout 16th and 17th century A.D. *minars* had been in insistent vogue, in a manner unknown in the 15th century, itself, while in Gujarat even in the 15th century, the very *minar* architecture achieves sublime proportions and workmanship, as in Jama Masjid, Ahmadabad (1423) and Jama Masjid, Champaner (1485), but becomes less and less in the 16th century A.D., as in Sarkhej, Ahmedabad (Darya khan's and Achuyut Kuki's tomb) and Mahmudabad and Sojali, until the middle and late Mughal periods when it again rises (at the lateral ends mostly) as in mosque of Shah Alam and Muhafiz Khan in Ahmedabad, besides Rani Sipri and Rupavati mosques of the 17th century A.D., not to mention Aurangazeb's wife's mausoleum at Aurangabad (Bibi-ka-maqbara). It may be mentioned that the *minar* as a watch-dog element of the grandeur of Islamic prayer, however, had received a set back when Akbar introduced his own *Din Ilahi* cult and gave up faith in conventional Islamic theology, and this should have brought about a *minarless* style to religious and other mausolea. As Jehangir had been at war with the Akbari outlook and those of his realm, like Abul Fazl, and as Shahjehan was, as an innovator, bent on introducing a sense of harmony to the compositions which he introduced, the resurrection of the *Minars*, though not for *Azan* function as such, but as aesthetic elements integrating vertical buoyancy to the otherwise horizontally emphasized structural scheme of the Mughals, took place.





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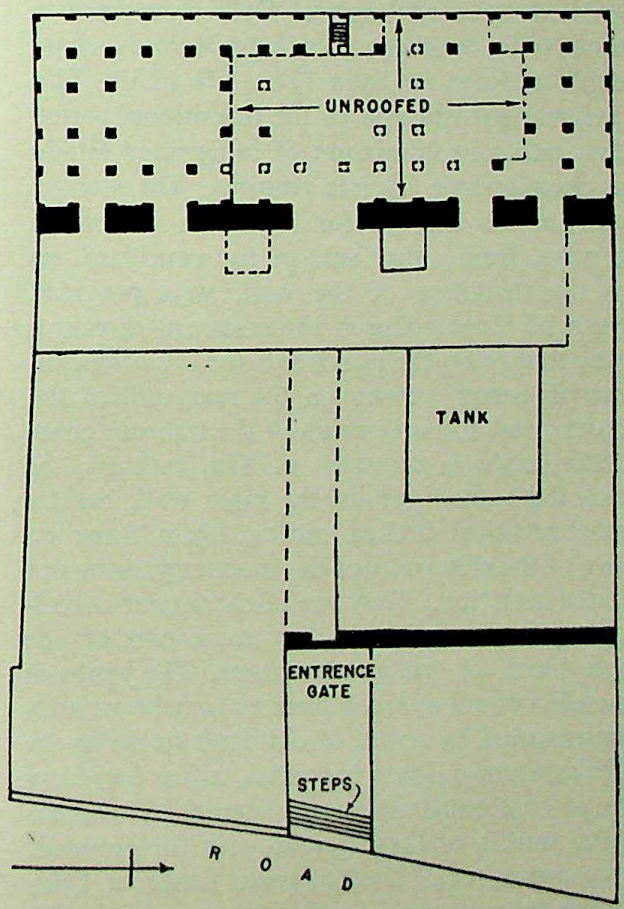
52. *Bibi Sahib's Masjid, Burahanpur.*

But before we conclude, we are bound to note what has happened at Bijapur which was virtually contemporary with the Mughals. Here giganticism and harmony were integrated for the first time.

The Bijapur architecture (pls. LXXVI—LXXXII) as it emerged shows that the builders were fully competent to span very large stretches in both space and partitioning of that space. We have mighty arches like Bara Kaman, which can span bridges. We have wood work which could be considered as a natural use of heavy and full size timber from whole tree trunks—in a manner reminiscent of the monuments in Kashmir like the Shah Hamadan mosque there (16th-17th cent.)—used in Asar Mahal, Gagan Mahal brackets and elsewhere at Bijapur. We see the confident use of plaster for very elaborate ornamentation in medallions and pendentives (pls. LXXXII and LXXXIV); where decoration does not over whelm the space modulation; where heights of ceiling are kept at a range unknown even under the Mughals, where the need to accommodate a large volume of people who use the places is evident; and where the *minars* are more notable for their size and storeyed graduations than for their slenderness, as seen in the Gujarat style the Mughal; where trabeate architecture is fully integrated with the arcuate to arrive at compartmentalization of interiors (pls. LXXXV and LXXXVI) and where very artifices, as of the largest dome (Gol Gumbad-1658—pls. LXXXVII and LXXXVIII) or high arches for sides of the facade (Gagan Mahal) or massive cannons (Malik-i-Maidan) are dexterously contrived in order to show pomp, inner strength as well as a total freedom from the type of linear or vertical rhythm by which Mughal art is motivated. Bijapur shows the display of cuboidal volumes,



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with all parts suffused within the central cube and holding the voids within in perfect strength. That Bijapur art also started with building on the borrowed styles of Imperial Delhi is more than attested to by the mosque built by Malik Karimu-d-daula-wad-din, in Saka 1242 (A.D. 1320). This is a forthright example of the transitional period with a judicious admixture of indigenous Hindu and characteristic Islamic features. The mosque stands in two storeys for approach to which stairways, from either side of the courtyard, set into the thickness of the wall, were provided along with those going in the eastward direction to the terrace on the porch side for the *azan* call. Battered corner towers on the rear wall of the mosque, and full utilization of the trabeate construction style is attested to. The *mihrabs*, of which there are three on the main wall, besides almost identical arched niches, again three on either of the side walls of the sanctuary, draw our pointed attention. They are of the astylar corbel-arched principle with the key stone part of one single block of rectangular shape. The jambs of the main central *mihrabs* seem to have been partly supplemented by re-use of old jamb stones as the differing stone colours indicated, unless they may have to be deemed as just accidental. The ornamental motifs of these jambs with the pot-shaft usage, again, recall the Sultanate jambs at Qutb mosque *maqsura* arch screen counterparts. We do not know what was the compulsion to continue this type of corbel-arch, as late as in 1320, in Bijapur, when already during the time of the predecessor of Qutbuddin (A.H. 717-21)—under whom Malik Karimuddin was a Deccani governor—namely Allauddin Khilji, if not slightly earlier, we find the true arch had been introduced in Delhi and elsewhere. But, perhaps it took some time for the true arch usage to diffuse into Bijapur zone of south India, and besides as the builder of this mosque at Bijapur was Hindu *Sutar* (carpenter), by name Revaiya, perhaps, he used principles, known to him then in mosque other than the *mihrabs*. *Sutars* were known for the best cut stone or metal work even in Hindu temples, apart from wood work, thus the whole trabeate conception of the mosque may be that of Ravaiya. Only 'coffered' ceilings, well known for several centuries in Hindu temples, have be reused here in the sanctuary and in the porch. Perhaps, originally the superstructure had *jali* work, in wood or stone, on the side walls of the now derelict upper storey and had totally disappeared. The large and spacious sanctuary, the courtyard without any *wazu* pond and without any front *minars* but with the side buttresses, all seem to place this mosque between Delhi and Bayana-Kaman stage of the Late Khilji-proto-Tughlaq style of architecture, and forms a precious preface to the early trends in the formulation of the Islamic mosque at Bijapur.

A convenient chart of features, motifs and structural modes, comparable to one another though spatially separated in various regions of India, in Islamic architectural enterprises has been furnished in the *appendix*. It will replenish, in a compact and direct manner, what could not be achieved by mere descriptive verbiage on the monument styles of the several regions. It will also present what the eye, otherwise untrained in art history, may fail to pick even from a photograph or a personal inspection of many of these monuments. The environmental character of most of these monuments today are so distracting that they do not facilitate a proper focus in our mental

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ken of the fundamental formal elegance of features, their compositional variety or distinctive diversity from the other *milieu* in a different region. It is hoped that this chart will serve this afore-explained purpose and will stimulate comparative stylistic or analytical studies in the regional facets of the Islamic architectural exercises which have become a legacy.

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Seven

Mughal Phase

(i) The advent of the Mughals on the scene of Indian architecture can be compared, in its finiteness, variety and basically aesthetic prespectives, and a prevailing sophistication in idiom and idealogy, only with the rise of the Imperial Guptas, at another time and context earlier, nearly thousand years earlier, and seems to prove the fact that it was certainly a millennium worth waiting for. The Islamic architectural setting under the Mughals was one of deliberate cultivation of beauty, of proportion, harmony and distinction in detail. Construction was not based merely on material costs, but on the final evolution of a visual splendour, of consistent artistry, of connoisseurship-which was only matched by a court life where religion seemingly took a secondary place and an inner contentment with the art results achieved was the key-note. The Imperial Mughal throne was adorned by five generations of unusual personalities, starting with the originality of Baber, of the cultured humaneness of Humayun, of the integrative brilliance of Akbar, of the sensitive, if a shade sensual, strain of life—style of Jehangir, and the completely refined aesthetic virtuosity of Shah Jehan. It was spectacular to such an extent that the let–up seen perceptibly in the time of the last, and certainly the least, claimant to this heritage, Aurangazeb, left a clear void in the shrine of beauty and the dignity of artistic involvement, and in the sequel, quickly brought the Mughal art to a somewhat unceremoniously mediocre *finale*. Politics-wise, the age of Baber was one of exploratory exercise in innovation; of Humayun, introduction of a salubrious temporal climate of pure sublimity, notwithstanding the inclement and stormy Afghan-Suri weather ; of Akbar, a total revolution in intrepid cross-fertilization of the traditions of the individualistic ruler and the no less splendid ruled whose *elite* were permitted to adorn the Imperial court, harem and administration; of Jehangir, a surpassingly suave altruism in his application to the spirit of environmental elegance; and of Shahjehan, the unparalleled commitment to sheer perfection of craft skill and visually rousing translations of etherial dreams into finite reality. Medieval Islamic art history in India found, at last, patrons and practitioners with the *penchant* for well-cultivated artistry, love of the full and many-splendoured life style, and total synthesis of exotic and indigenous architectural and art mannerisms, through a compromising but yet subtle understanding of its nuances; and giving, in the process, for the first time, the greatest chance for artists, architects and artisans for fresh and stimulative manifestation of their respective skills The element of spatial or horizontal rhythm of the layout of the structures, beauteously intertwined with a vertical symmetry of skyline was one of the most outstanditng character of the Mughal constructions. Raw materials were carefully selected, designs

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were understandingly explored and surface ornamentation persuasively incorporated, so that the work fully reflected the basic harmony of social life and of the patrons' own persons metaphorically, and of a competitive co-existance with the craft heritage of the adopted land. At no time, in its long and often chequered history of Islamic architecture, was technical perfection made so insistent, without regard to the wherewithal, where art was placed, as it were, on the throne and wershipped with a zeal that won the unqualified approbation of the onlooker, regardless of his religious affiliation. "Art for art's sake" was the burden of their song, and what celestial dimensions of that art were reached within the ambit of terrestrial limitation!

If the structural articulations of the Mughal age (Pl. LXXXIX—XCVIII) were to be dissected, the essential factors going into its frame work might surely be (a) total evenness of surface and of veneer; (b) the subordination of detail or the *part* to the *whole*; (c) the unabashed highlighting of certain focal zones of structural models with verily the chastest motifs in the richest material; (d) the sublimity of landscaping and abstract transformation of concrete techniques; and (e) above all, the inter-related sense of proportions to even physically separated edifices or *ensembles* in a complex. The functional purpose of construction for the mundane utilization by mortals was swept aside, and a delectable predication that the structure was fit to be reverently used—and not abused through crowded wallings, crude appendages and irrelevent *melange* of art idioms —prevailed. Some of the features that helped in this are : emphasis on a horizontal layout, avoidance of multistoreyed palaces or conscious propinquity or isolation of functional parts, as the case may be, and minimum play on an exultantly elevated and methodical skyline. If we imbibe the chief creations of this age, as seen at Humayun's tomb, buildings in Agra Fort and the other coeval structures across the river, buildings at Sikandra and Fatehpur Sikri, the palace-citadel or Red Fort, Delhi and that supreme touch—stone of Mughal art sensitivity, the Taj, Agra, we would not only be experiencing the inception of a new *vogue*, but also a fresh and refined architectural prespective substantiating the spirit of that whole age convincingly. Finest even coloured sandstone, impeccably lucid marble, carefully selected semi-precious inlay stone material and a highly disciplined brick work core, allied with the most cohesively fine shell-lime plaster (for secondary wall surfaces where stone veneering does not suit) indicate how the design was destined to attain the perfection that was envisaged by the builders. Quarries and sources were diligently explored and located and cut-stone craftsmanship of rigorous standards consistently enforced. The veneering techniques for walls and ceilings were of a nature that shunned empirical devices in order to achieve a pleasing smoothness of surface unity and uniformity alike. Overhanging or protruding parts of the roof or wall were again cut to the minimum, to unfold a highly disciplined exercise in exterier rhythm where promiscuity or crowding of disparate motifs was eschewed. The mouldings on plinth, wall, ceiling and cornice were all systematized to a predetermined norm. If a certain luxuriently extravagant display of ornamentation and structural repetitions are seen, as were found in some of Akbar's works alone, these were the deliberate expressions of *that* stage where the rich indigenous architecture

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was allowed a conscious co-existance if not integration. One may perhaps, without cavilling at it, consider Akbar's phase as a 'regression' from the disciplined symphony of parts persevered in by both Humayun and Jehangir, before and after that Grand Mughal, and certainly by that complete aesthete, Shah Jehan This regression did bring a certain heaviness and ponderosity to the otherwise light and floating effect of Mughal structures. The horizontal unity of structures in the non-Akbari buildings also does contrast with the somewhat disarrayed and askew overall strike of Akbar's ground plan, as at Fatehpur Sikri. But, even, so, the finish given to an erected structure still speaks volumes of the essential *genre* of Mughal articulations.

Strutting and isolated parts like *minars* (as in earlier architectural phases) were generally not preferred and mostly reduced to minarets whose body is suffused with the wall and with a minimum projection into the sky, or as a separate and detached adjunct, so convincingly and uniquely introduced in the Taj. It would show how much of skill in design and balance had gone into the whole endeavour. Perforated *jali* screens were not permitted indiscriminately or in an unbalanced way, and were mostly confined to interiors or spots where the play of light would lend them a mystique. Integrated special parts, as the inner pavilion in *Diwan-i-Am* of Agra or Delhi, were made to be subordinate to the spatial character of the total hall, and were either merging or submissively contrasting with the colour effect caused by differing raw material or media. Flights of steps which jar on the smoothness of line of structures were similarly avoided, seemingly supplemented at ground level, by portable devices, introducing also in element of courteous ceremony for the movement of royalty amidst them. Wherever special ornamentation has to acquire a high water mark, it was made unbelievably rich, as in the throne above of *Diwan-i-Am*, Delhi, or the crypt screens at the Taj. Where the crests of buildings were to achieve a certain distinctive visual grandeur, it was seen to that they form a mild and gradual *crescendo*, without any abruptness and were even consiciously underplayed by introducing solid screens, as in the town-ward entrance skyline to Badshah mosque at Fatehpur Sikri, or the skyline of the main mausoleum at Sikandra-which latter monument incidentally was virtually modified and completed by Jehangir, after he was satisfied that the earlier design did not stand upto his rigorous aesthetic scrutiny. It is amazing that, whether it was Humayun's tomb or the Taj which was after an interval of nearly a century, the artistic guidelines have been diligently maintained, so as to indicate an inexorable inner discipline and rigorous implementation; thus, what appeals here to a true art historian and planner, is the total commitment to harmony and suffused glow of beauty in these, rather than a flaunting of sheer spectacle and splendour. Thus, planning had gone into the erection of these edifices in such a manner and with such a *regimen* that had not been witnessed in the earlier phases or Islamic architecture, anywhere in India, except perhaps in the planning of Kotla Firuz Shah citadel by Firuz Shah Tughlaq-notwithstanding the decided ruggedness of raw material and plain plaster of the latter. We surely derive a certain overall satisfaction in the perspective—planning, spacing and layout of the Firuzian citadel, though this cannot certainly bear a candle to, or too close a comparison with the

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Mughul *genre*,not-withstanding that, for his age, Firuz was clearly *avant garde* and introduced soberly beautiful elements (as we have noted elsewhere) which were to be seen only in Mughal monuments much later.

It is said that the Mughal kings, with the blood of both Turkish Timur—'Sahibikiran' an he called himself-and Mughal Genghis khan, truly felt that they had a divine right to rule a great empire and be given a saintly status as well and were inspired thus by the concept of *Hasht-behisht*-the eighth paradise of almighty-a-concept which, according to Khonda-mir, was first enunciated by Humayun[1] whose floating water palace said to have been built on the Yamuna symbolised it, though not extant now-and which was subsequently convincingly delineated in Humayun's tomb, Akbar's palace at Ajmer, Jehangiri palace at Agra and even in the Diwan-i-Khas of Fatehpur Sikri, and culminated in the Tajmahal. This structural formula was a combination, in a harmonised aggregate, of four equal parts, as so evocatively seen in Humayun's tomb and the Taj, and had been a Persain concept, which incidentally also was characterised by a suffused, true *ivan*-the recessed major arched facade of a structure.

It is sometimes also said that Humayun continued to some extent Lodhi *penchant* for *chattris* on the roof. But it can be safely stated that the Mughal use of these elements is different from that of the Lodhis, as these are found in Humayun's tomb in the interior of the roof terrace around the central dome. It is certainly different from the octagonal outline of the Lodhi-Sayyid tombs and the eight *chattris* on the eave —edge of roof, which though having a virtuousity as an ornamental frill, cannot compare to the organised inner-relationship of the low-merloned roof edge, the compressed hemispherical central dome, the mildly curved drum and the in-set nature of the *chattris* which, in any event, merge in a cluster with the adjacent parts in the Mughal specimens, whether at Agra or Fatehpur Sikri or Sikandra. The consistent adoption of a rectangular four-pointed arched, low-vaulted dome, with even-numbered finials on them by Akbar and Jehangir (besides the fusion of corner *chattris* in stunted minaret forms instead of a true corner *chattri*) in preference to a regular dome, as in the Humayun's tomb or the Taj, seem to distinguish the Akbar-Jehangir phase from the earlier and subsequent ones. Similarly, when between 1627-34, Nurjehan built the tomb for Jehangir at Shahdera (Lahore) on the Ravi, two corner minars rose in dignified elevation crowned by a *chattri* and these were the same type that Jehangir himself had worked out for the south gate of his father's mausoleum at Sikandra and thus would be essentially a Jehangiri idiom.

Among the several subtle modification introduced in base-plan at Taj, over that of

1 Babars diary, in Chaghatai Turkish tongue, also refers to a building perhaps of wood, called *Hast Behisht*-seemingly similar in form to the pavilion of the same name at Isfahan (1666 A.D.) or the eight paradises incorporated with Bagh-i-Bulbul, laid along with a *charbagh*, just south of the royal palace there. This seems to be thus a Persian symbolism brought to India by Mughals and integrated into their notable buildings.

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Humayun's tomb and that of Akbar, would be especially the deliberate chamfering of the corners into a regular wall-facet at the latter place, and which was integrated with a diagonal axis also, in tune with the octagonal central mausoleum proper here and the similarly octagonal crypt within (in contrast, however, to the wide rectangular cardinal halls of Humayun's tomb), with which the corner units were interlaced by axial, cardinal cruciform wall lines. Thus, Shahjehan's powers of synthesis and conversion of square into a broad octagon were both symbolic of *Hasht Behisht* concept and strictly adequate technically for foundational tying-up and inter columniation above the floor. While in Humayun's tomb, the basement terrace was a honey-combed scheme of chambers on the face and in the interior, this, in the Taj, became a solid and closer to the main mausoleum structure and with faces picked out into arch-reliefs, with architraves and a parapet. The apparent reduction of terrace space was balanced through the four isolated corner *minars* to full height in three tiers, with a *chattri* merged at the top and the whole reared over the common octagonal terrace base. But the *chattri* itself is, in total height, not rising higher than the top of the drum; and the embellished hip or neck below the dome itself is marked with interwined relief of arch-miniatures and a firm horizontal band above. These minarat details essentially draw from the Deccani *penchant*—borrowed in turn from the Ottoman[2] idiom for the interlaced arch-crestings for the *kangura* parapet of the drum of the dome, as well as the edge of the main base roof. But here, with Shah Jehan, the integration and synthesis of ornamentation with the body of the structure was in order that they may not put forth an element of extrāvagance, at the cost of the gracious mould of the main structure, and this is unique and something which could be conceived only by a mature architect who cared for *massing* and *articulation* to go together and not independently of each other and seemingly was even the monarch's own vision.

Akbar's penchant for striking a balance between erstwhile Islamic modes of architecture and his own policy of equidistance to all other religions and culture, especially Hinduism-of whose faith many of his queens and courtiers formed a distinguished extraction-resulted in his modifying residential architecture into an indigenous one almost entirely, designing to bring into it only certain known symbolism of the west Asian heritage of Mughals, both in structure and in ornamentation. During his time and that of Jehangir-who was a great connoisseur and applied his mind to the erections of his constructions—were thus less and less outspokently conventional and virtually set the trend for even the indigenous Hindu princes to follow in their tracts, in secular architecture. In Akbar's time, the whole of Fatehpur Sikri, a good part of the buildings at Agra Fort and the Ajmer Palace, reflect the norms thus established. Islamic motifs, of course, dominate at Ajmer (1570-72) and the general feeling is prevailingly arcuate. The arrangement of windows as architectural devices surmounting

2 In much the same way as idioms yrevailed in Mughal dothern India, Ottoman Turkish infiuence was widely and directly felt in the Deccani Kingdoms of Adilashahi and Qutb Shahi and even Barid Shahi zones there.

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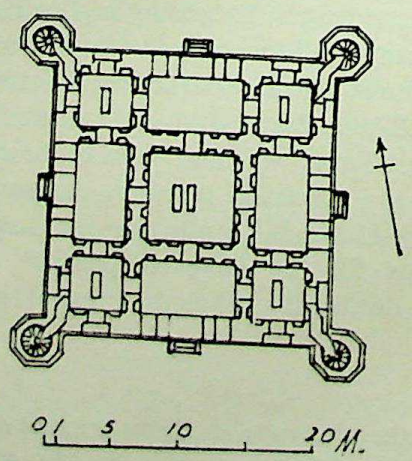
63. *Tomb of Ittimad-u-ddaula, Agra, plan.*

the portals at Ajmer initiated in his time, may show that *a Divan-i-Am* was intended, as a part of this structure. The elegant *baradari* at the centre, with double-storeyed corner rooms, four columned *ivans* and a central audience hall are all tasteful and sober. The stark and strident portal pillars, with ubiquitous brackets of great workmanship, the flat roof, subdued merlons and a low clerestoreyed central roof top are all persuasively indigenous mannerisms. The four octagonal corner chambers in storeyed pattern form a direct bequeathal of defensive architecture, but fused here with civilian usage. The central entrance porch-projection was harmonised with the corner buttresses, and the antechamber of the porch has two spacious side chambers immediately flanking it-again an indigenization. The upper storey of Jehangiri Mahal, again, at Agra (1585) is less elevated than the lower, and the domes of the erstwhile mode were replaced by flat pyramidal or gable vault roof. The entire resultant picture is more of the typical *haveli* pattern of Rajasthan and upper India, with a central courtyard also, with large side chambers on two of its sides-a feature which does not seem to have found favour with Shahjehan, however, who opted for an essentially *linear* layout of the residential palaces, as at Delhi (*Lal Qila*). The central projecting *jharokas* of the inner courtyard in the upper storey were provided with perforated *jalis*, alike for female privacy as for delicacy of elevational device and cuting out glare. During Jehangir's time, when Ittimad-ud-daula tomb (1622-28) (Fig.63) was built for his minister of finance and father-in-law, it followed again the essential elements of the Ajmer palace of Akbar, showing how the residential and sepulchral architecture get a harmonised and standardised norm at this stage. Further, along with the introduction of *arabesques* in curvilinear design and red sandstone matrix inlaid with coloured marble, polychrome *pietra dura* also gets introduced, with the spandrels and niches getting filled up with 'vessel' pattern containing flowers whose inspiration could be from Persia as well as Central Asia. Seemingly, they represent the wine-and honey-filled vases which are assured to pious believers in Islamic paradise. At



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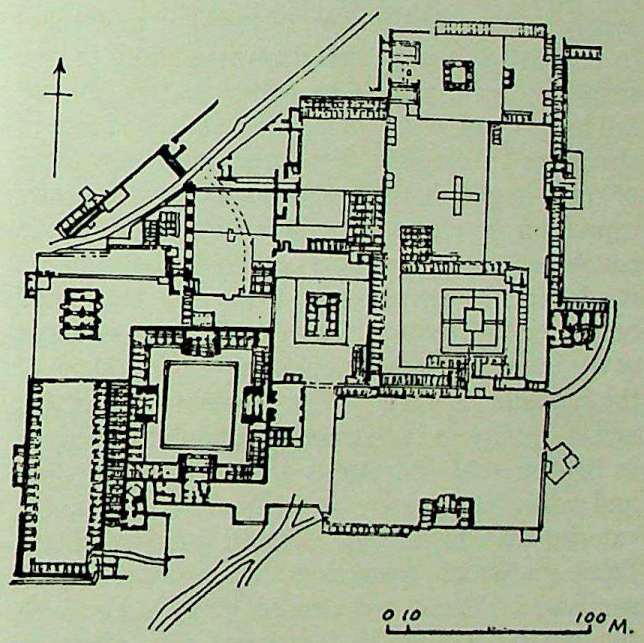
64. *Layout of Palaee and residential complex at Fatehpur Sikri*



Shahdera near Lahore, Jehangir's tomb (built by Nurjehan) we have the replacement of the cloisters on the outside for *caravan serai* use, *instead* of for administrative or residential functions, as earlier, and the interior tomb layout shows a *char-bagh* inner courtyard, within a *char-bagh* outer garden.

In Akbar's tomb at Sikandra also, of 837 square yards layout completed by Jehangir in 1613, we have same design elements implemented, besides the flat rectangular pyramidal domes for *chattris* and the main upper roof of the tomb structure. The low-profile structuring, with double-storeyed height of dissimilar elevation and prominent *chattris* and elaborate brackets become thus an insistent type and influenced the neighbouring Gwalior region also, where the *Rauza* of Sheikh Mohammed Ghaus at Gwalior (1563) duly copies it, though on a decidedly lesser aesthetic plane with its over-heavy *chajja*.

When we first see Fatehpur Sikri (Fig.64), we are amazed by the regimented regularity and close propinquity of the structures in an over-compact complex, provided though with all the requisite elements of utility, design, ornamentation and space for entertainment, but one thing that yet marks out Fatehpur Sikri is the total discreteness of indivdual parts, though in close proximity. This does not strike one's eye *prima-facie*, mainly due to the prevailing red sand-stone workmanship and the low profile, and once we are within it, its spectacular finish in each part and the maze of interconnections leave us overwhelmed. The reason, for this, besides other features of Akbari style-which as we had occasion to comment earlier, was a distinctive notional 'recession' in overall Mughal designing and an atypical distinctiveness against the traditional Mughal trend-is that Akbar was constrained to build the

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complex of structures on the diagonal strike of low rocky out-crops which stretches virtually across the fortified city on one side of centre and in contriving to organise the orientation of the structures within such an *askew* pattern and to fall in line, yet, with the traditional orientation of structures in cardinal directions, all on the ledge of rock, he was left without much option for any expansion or alteration of the dimensions of the constituent parts, beyond a certain degree, with the result that the structures will have to be studied only functionally and individually on merit, but as the integrated totality, the complex falls short of the capabilities alike of the monarch and of his age. Virtually no two structures in proximity agree in their mutual dimensions or elevational rhythm, and while interiors are certainly more ornate, the exteriors are bland and neutral, though of the finest cut-stone veneering in impeccable pink sandstone. There are also so many floor levels for one to negotiate in the complex without any terracing apparent, as is so typical of Mughal architecture, that one would think that it was the proclivities and declivities of the bed-rock that had been the chief guiding factor in organizing both the perimeter and levels of individual structures and their ancillary floors.

Of course, the touch-stone of Akbari style-at its best-should be sought for only in the three magnificent structures of Fetehpur Sikri, namely, the *Diwan-i-Khas*, the Jami Masjid and Jodhabai's palace-each spectacular in its own way and clearly distinctive from one another. Of the others, the Panch-Mahal stands out, both physically and symbolically, as a pointer to the direction in which the monarch's compromised art ken was stretching. The Jami masjid is perhaps the most finished product of the age and within it nestles the *Dargah* of Salim Chisthi, embellished to a remarkable degree in pure translucent marble and mother-of pearl inlay, verily like a '*bijou*' jewel casket, for which a far away and somewhat lesser parallel is that of the Rauza of Shah Alam at Sarkhej in Gujarat. The entrance of the Badshah mosque is a symbolic representative of the exultant and majestic expanse of the personality of the monarch. It may perhaps be added that it equally highlights the conformist conventionality by its inner layout. This is a pointer to the devout associations of the King with the Saint enshrined within and for which, in his years of yearning for an heir, he reputedly made fervid and humble pilgrimage on foot here, as for the Hazrat Khawaja Sahib's *Dargah Sharif* at Ajmer. As for the *Divan-i-Khas*, this is indeed the most unique and unconventional structure of the realm-quite in keeping, however, with the committed eclecticism of the king, which is reflected in the monolithic central pillar and royal seat above and spoked and radiating passage bridges which stand seemingly for the unity in diversity or central core and peripheral diversity of the faiths of his realm-as he saw it. By and large, Fatehpur Sikri is 'order in desolation' organisation in dichotomy, tradition engulfed in enlightened bipartisanship, and craft at its resplendent best. However, it was perhaps one of best among utilitarian palace-complexes where function outran landscaping and fusion was painstakingly sought to be visually established among the contending cultural strains, by its sturdy royal patron of goodness and grace. It was a shift, however, from Ajmer, and Agra in his own times and it is, in the ultimate analysis, its originality of the layout and compactness of the design that will ever have the claim on an architect's attention.

89. Humayun's tomb, Delhi.

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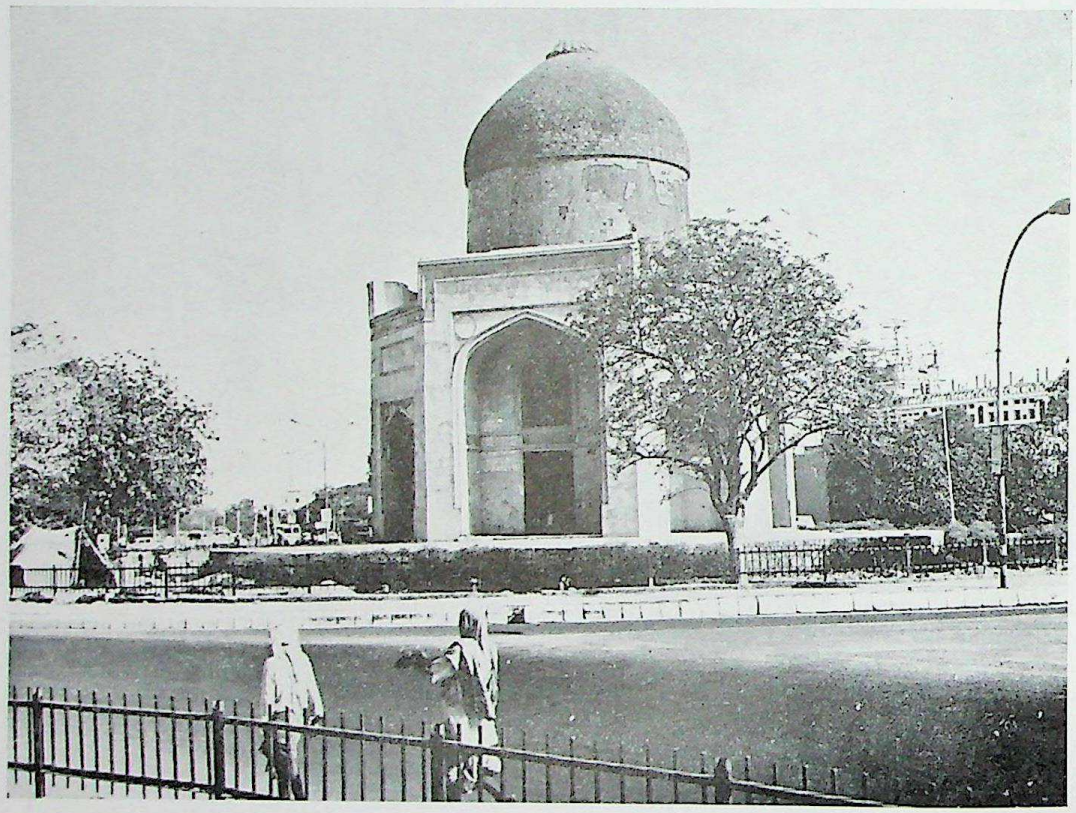
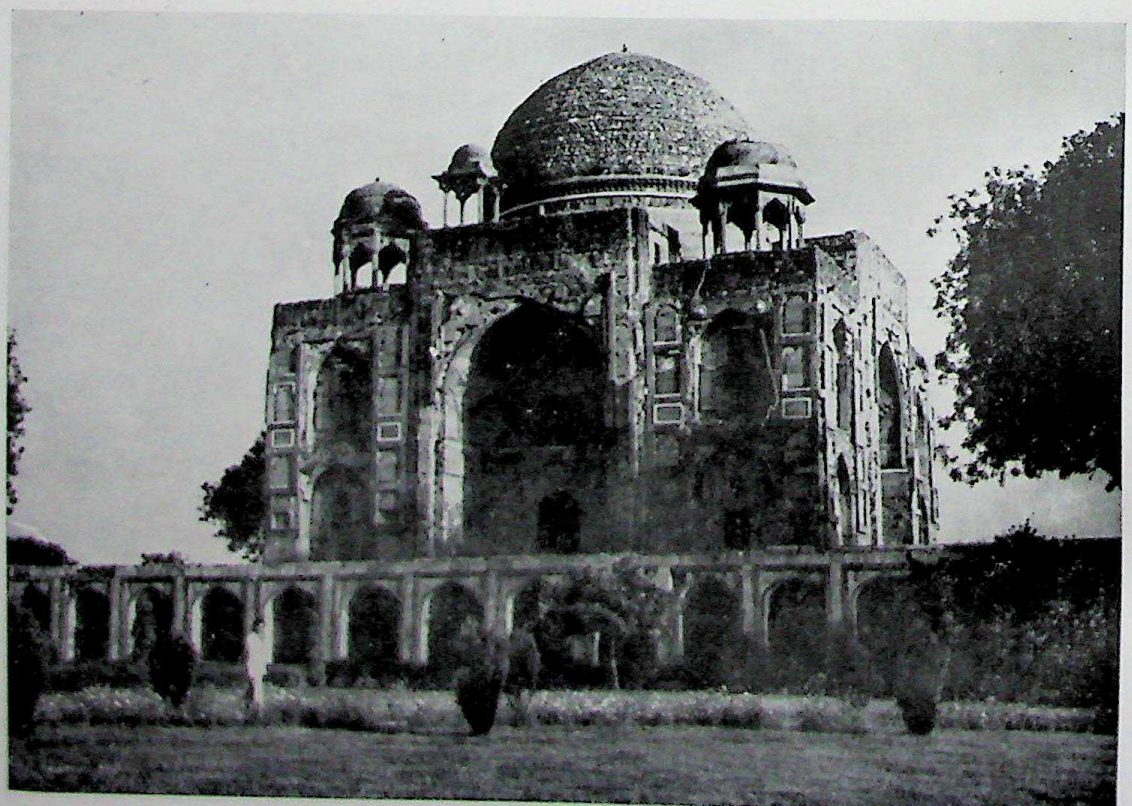
90. Sahr Burj, front of Humayun's tomb, Delhi.

91. Mausoleum of Khani-Khanan Abdur Rahim, Delhi.





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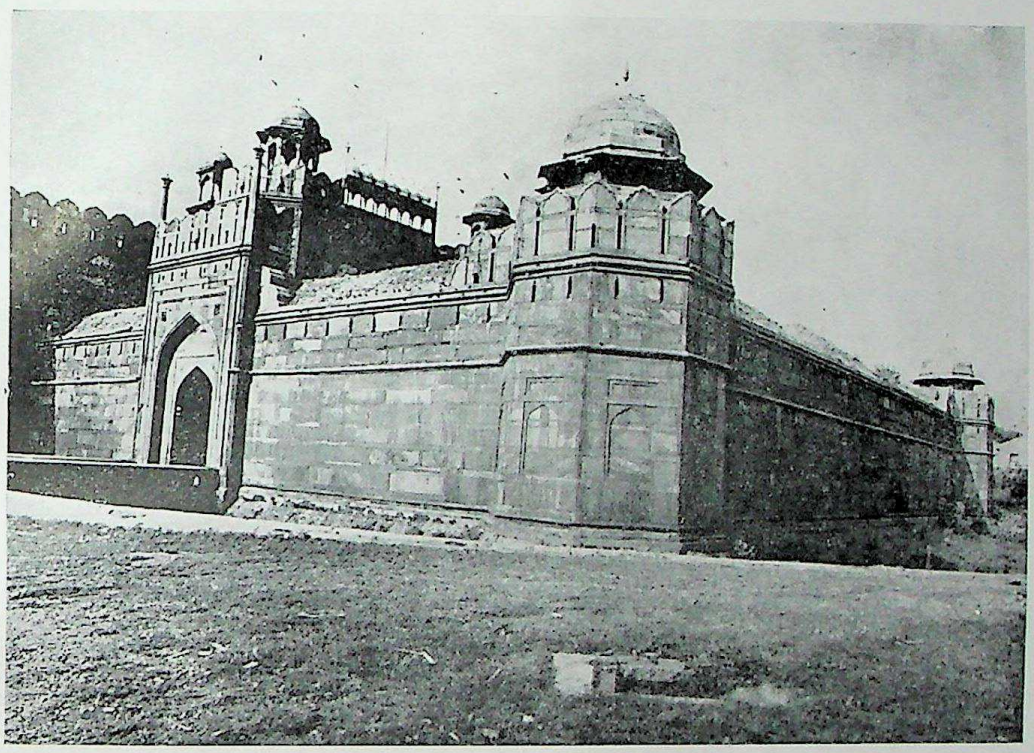
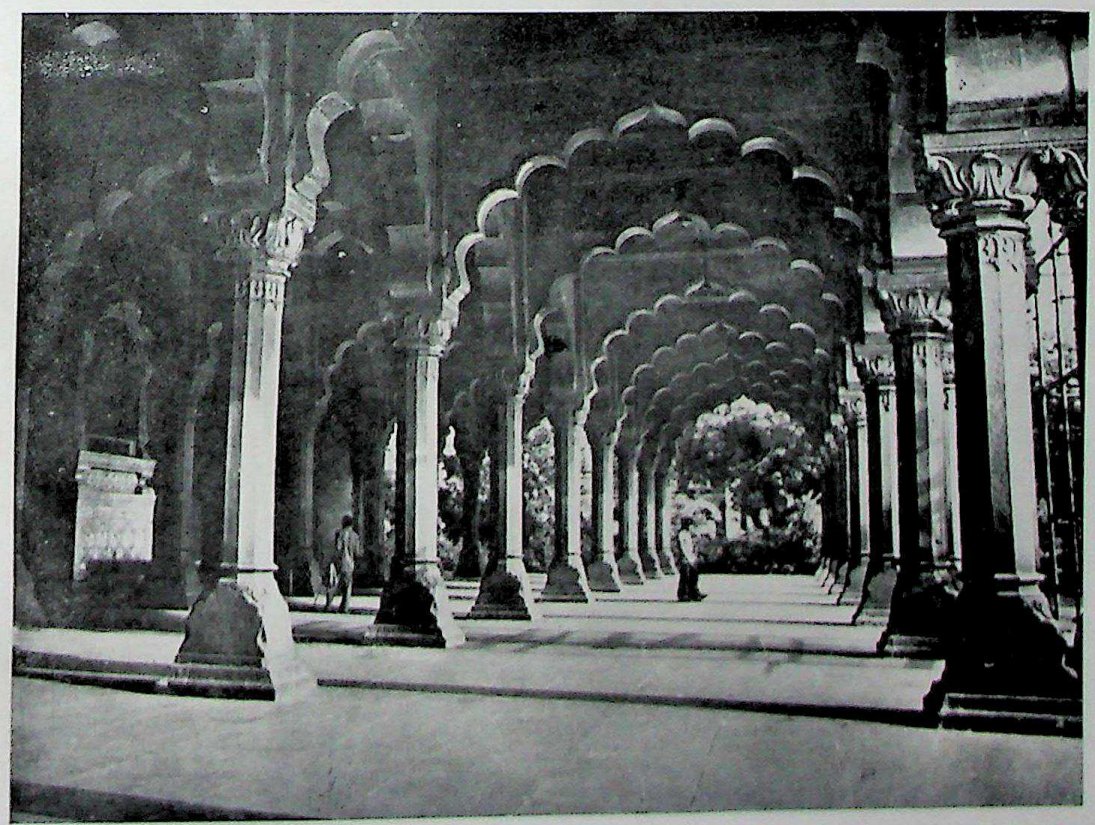
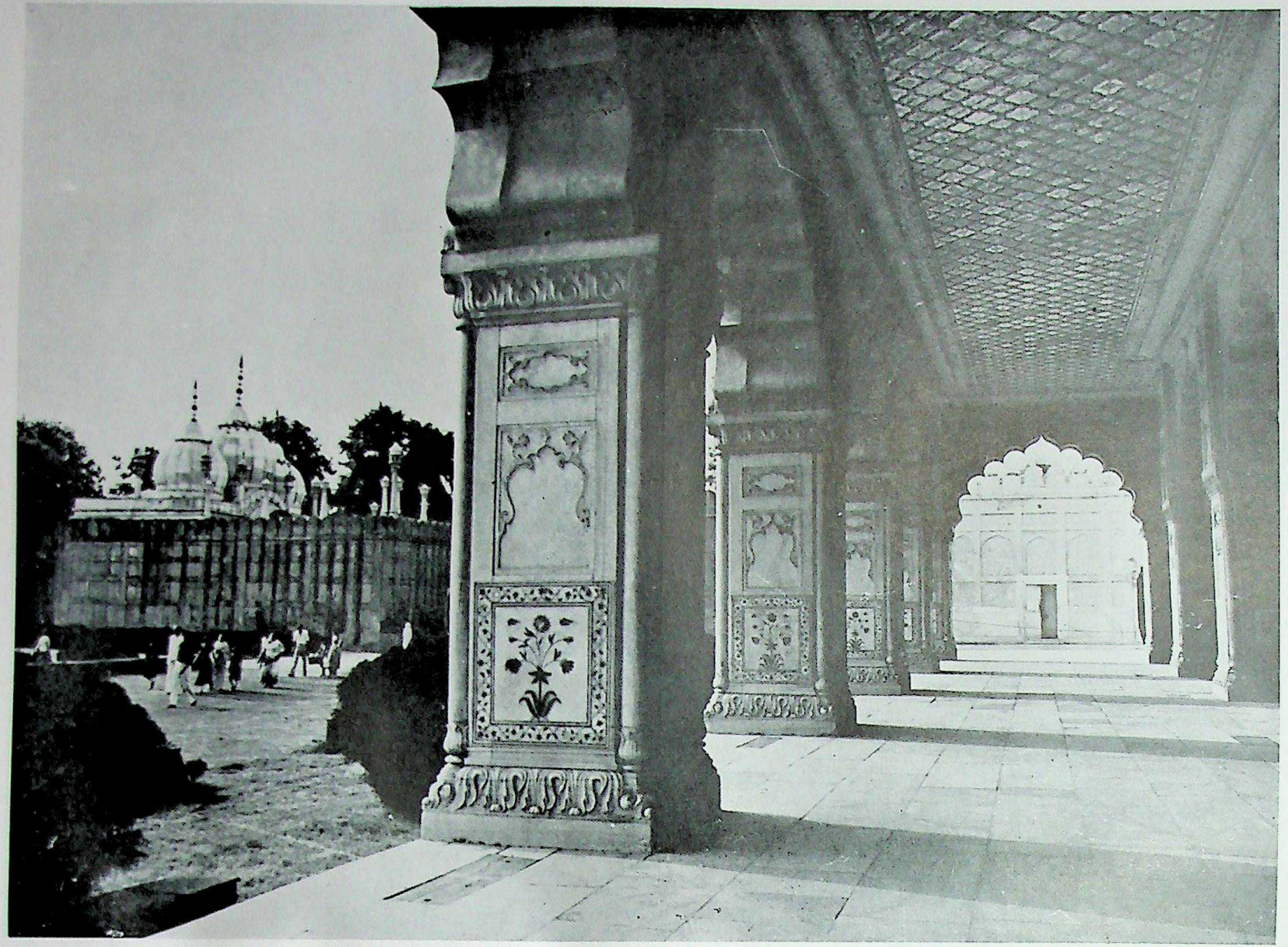
92. Lal Qila, Delhi, Corner battlements and gate design

93. Diwan-i-Am, Lal Qila, Delhi.





94. Diwan-i-Am, Lal Qila, Delhi.



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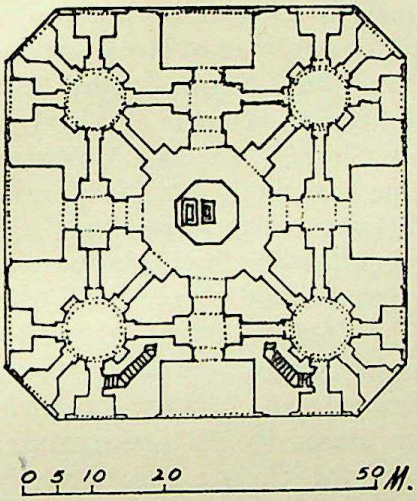
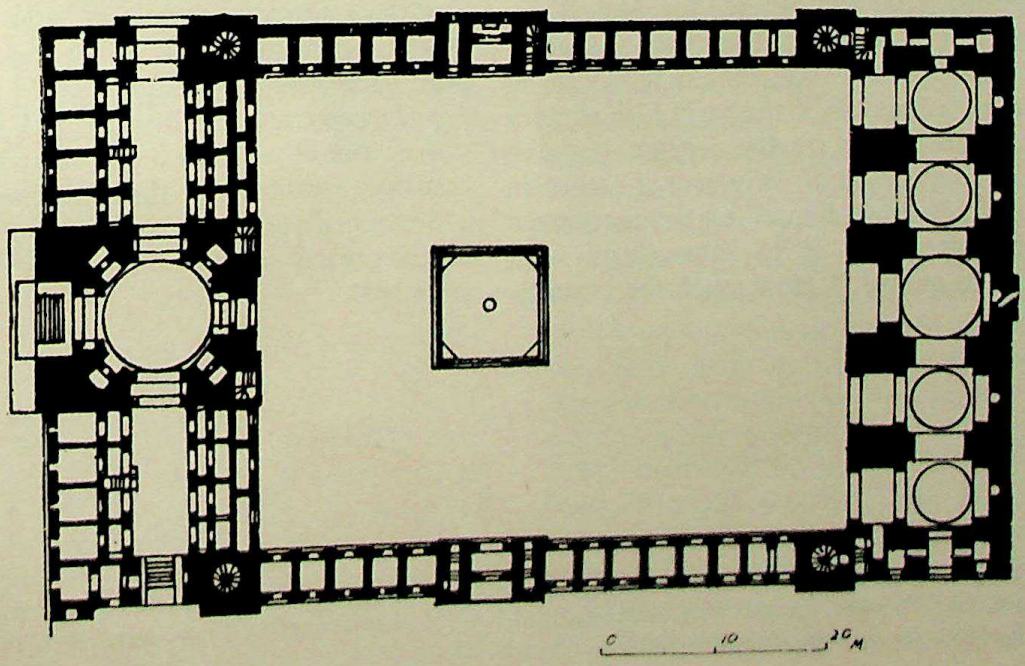
65. *The fundamental pattern of the Taj Mahal mausoleum, Agra.*
66. *Mosque of Wazir Khan, Lahore.*





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When we come to Shahjehan and the Taj, we are transported to a new world of perfection in refinement, pellucid design and surpassing harmony of parts. Its floating and etherial character, its unmatched integration of detail, reared on what was decidedly the most complicated foundational wall scheme of the *Hasht Behisht* symbolism (Fig 65) and an element of radial tie-up imparted by the diagonal spoked compartments of its basal net work.

It has repose as well as movement, fusion as well as clarity, spectacle as well as vital spirit. One of the features, said to be sometimes missed in the composition of its most tasteful surface inlay decoration, is the *dado* which is running around both the inside and outside base of the building and had been picked out in flowering plant motif in low relief. This surrounds even the innermost cenotaph where however it is, becomingly, in *pietra dura.* It has been suggested by some scholars* that this should represent an European herbal motif of the early 17th century which may stand here for the Islamic paradise garden of *Hasht Behisht.* A personal record in Persian of the Badshah himself on the monument seems to corroborate it to some degree and deserves to be quoted.** How much the exquisite harmony of Shah Jehan's architects for the Taj (of whom three possible names are mentioned, namely Ustad Ahmad of Herat entitled Nadir-al-Asar, Mir Abdul Karim entitled Ma'mur Khan-who worked for Jehangir at Mandu, and Mulla Murshid Shirazi, entitled Makarrimat Khan) under the seemingly personal conception and watchful eye on Shah Jehan himself, had influenced certain other buildings is best explained by the dainty elevation and plan of the Mosque of Wazir Khan (Fig. 66) (1634-36) at Lahore, which in sheer balance and use of volumes in elevations scores one over the tomb of Jehangir at Shah-Dera. This has been caused by the organisation of central domes of the cloister and prayer hall and the appropriate rise of the southern and northern gates, in relation to the rise of the *minars* positioned in the four corners of the *sehn* integrated with cloisters. It is this matchless sense of proportion of the constituent parts that is the best element of Shah Jahan's times which was, paradoxically, to be succeeded by Aurangezeb's listless, pedantic and exaggerated outlines and lack of organization. We should as well hold, notwithstanding the many creations of this doughty champion of Sunni orthodoxy, his reign as falling outside the true organic scope of the Mughal architecture at its best.

3 "Like the garden of Heaven, a brilliant spot fully of fragrance, like Paradise fraught with ambergris In the breadth of its court perfumes from the nose-gay of sweet-heart rise" (Maulvi Moid-ud-din Ahmad '*The Taj and its environment* 2nd Edn. Agra (1907) pp. 121-22).

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Eight

Baolis and Hamams

In tropical India, the wayside well, if it happens to be a stepped well also, is just the answer to the prayers of the thirsty traveller and his riding animal, which the transport in ancient times for individuals of some standing was. It was also a tradition in India that much of the village gossip and exchange of ideas, particularly among the womenfolk, is transacted at the village well. In an urban situation, we may sometimes be led to think that wells (except in the privacy of houses) had no role-particularly if the city is located on a river. Delhi is one such riparian, urban centre of unparalleled status which has given a direct lie to the above thinking. For, during its chequered history, century after century, the kings and the sultans or their nobleman had been associated with the construction of galleried stepwells in various parts of the city. The reason is not far to seek. The environs of Delhi, then as now, are rocky and even of low hilly outcrops, as at Tuglaqabad, the Ridge etc. In such circumstances, in a vast city, with the needs of men and animals significantly augmented by the prosperous and heroic times, the role of the stepwell or *baoli* has been distinctive for the soldiery and ubiquitous travellers, postal riders and palanquin bearers (for the more graciously living gentry). It should be said here that, in this regard, Gujarat went in a big way to organise the architecture of the step wells in a spectacular and elaborately utilitarian and multipurposed manner, so that perhaps the largest number of such outstanding *baolis* in *any one* State will be in Gujarat only, as has been indicated elsewhere in the section on Gujarat Sultanate style.

In so far as Delhi is concerned, it could be seen that these *baolis* particularly became numerous in the Tughlaq period and if we may hazard a guess, apart from date or style, this should have been a special effort during Firoz Tughlaq's times-since both by inclination and achievement, he had great interest in water bodies, channels etc. Even for effecting a riparian propinquity, he cut a diversionary channel from the main bed of the Yamuna which was somewhat away from his Kotla citadel walls, so that it could give a cool flowing water sheet, for visual delectation, to his residential complex located close to the walls, and seemingly also to provide the source for ablution to his Jami Masjid which also abutted on his fort wall. Be this as it may, we are interested here mainly in showing the pattern of elaboration of the *baoli* types in Delhi, in that and the contiguous periods of time. We have the Uggar Sain *baoli*, Gandak-ki-*baoli*, (pl. XCIXA) Rajon-ki-Bain (pl. XCIXB), *baoli* in Kotla Firoz Shah, *baolis* elsewhere, as at Red Fort, totalling to nearly twenty such of note in Delhi. No specific dimensional fixation between length and width existed. The largest length is however, 192 feet (as in Uggar Sain *baolis*) and also 183'×64' (as in Muradabad

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Pahari) with a three storey high position, and the smallest is 51'3"×18'5" (as at Palam). Except for three or four which are of the Mughal times, all the rest are pre-Mughal, begining virtually from the Sultanate period (as in Gandak ki *baoli* near Adam Khan's tomb, Mehrauli, which is of the time of Iltutmish (1210-35), and the latest is upto the late Lodhi times (as in the Rajon ki Bain having a record dated 1572 A.D. (918 AH), also close to Adham Khan's tomb to its south and also of Sultanate inception and Tughlaq—Lodhi elaboration. The maximum depth of water level from the top ground level has been as much as 105 step down, as in Gandak ki *baoli* and the minimum depth is at 22 steps as in Matauli village. The shaft is variously oblong, octagonal or circular or partly octagonal in upper stages and reduced invariably to circular form at water level obviously to prevent sub-soil scouring. The construction which is often deeply cut into live rock and lined with stonework comprising the typical horizontal bands of large slabs and compact coursing in smaller dressed stone in between, is trabeate throughout, without any indication of any transitional modes, as seen from Iltutmish times onwards. It is likely that Gandak-ki-*baoli* was therefore one of the earliest secular civic crections of the Sultanate times. The shaft is always of a cylindrical form without any support but abutted by the multiple storeyed jamb and lintel frontage and side terraces of narrow character on the flanks of the stepped courses.

Even in the Rajon ki Bain, the erection of the shaft of the well with its overworks is of a similar character and had been a creation apparently earlier than its date 1572 of a later record (which is the period of its Tughlaq to Lodhi elaboration), because there are several linteled niches on the main original side walls of the main landing steps which have been superseded by arcuate overlaps besides some examples in sandstone of the corbel arch on the top faces northward of either of the flanking galleries and in the main opening from the cross terrace at the third storey level, which were clearly of the Sultanate stage technique for arched construction. The stalactite squinches on the side *dalans*, however, are of Lodhi type when perhaps these side chambers were added at the upper level of the flanks and a mosque closeby on top was also built.

The approach steps to the well shaft in Delhi are always in north-south strike, with the well at the south end and the top landing on the north end. The reason could be either to avoid the heat of the east-west strike of the tropical summer sun light and also perhaps for providing a suitable *qibla* for prayer in the side cloisters, with which function it could be combined where separate mosques are not built near the *baoli*. This mosque addition is also normally found in a few cases, as noted above and the whole complex was set within a boundary wall, to give a degree of privacy to this amenity. There are some *baoli* with, provision for a cistern outside which will be filled automatically by an inter-connection, consistent with the rise of the water level, as at Red Fort in the Hayat Baksh garden well. We have already mentioned the *baoli* within Kotla Firoz Shah which seemingly was intended for horses and animals along with riders to rest and be fed and has specific elaborate provision for cisterns fed through terracotta pipes laid in the hearting of the wall.

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The top landing of the *baoli* is often battlemented and with extensive galleries at each level of landing down to the water level. The maximum number of such storeyed stages is five and is directly proportional to the depth of the main shaft and the water level. Arcades of pillars on the top storey, and recessed arches in the galleries are also common. Some times, in the north-west and south-west corners of the galleries, winding staircases to reach to the galleries and to the water level were also provided, as in the Sultanpur *baoli*, *baoli* at Kotla Mubarakpur, northwest of the western gate of Mubarak Shah's tomb (1421-34), and Wazirpur *baoli* where the top of this stairway has domed turrets. Sometimes, open pavilions in the corners are also seen, as in the Basti *baoli* (1488 A.D.) of Sikandar Lodhi times.

These *baolis* are mostly erected in dressed rubble stone masonry and rarely in sandstone, used only for interleavening or for pavilion structures, and compared to the Gujarat *baolis*, should be considered as less ornate and functionally less complex, although from the point of view of size, could be generally, on an average, comparable with those in Gujarat. The reason for this could be that Gujarat *baolis* are specific examples of private craftsmanship and certainly are much larger in number and thus do not provide for general use in all cases, but only for limited local usage. They are also invariably of fine ashlar cut stone masonry, with elaborate ornamentation and even sculptures on the pillars and landings and even on the shaft faces.

Hamams :

Correspondingly, in the *hamam's* and hot bath arrangements which the Mughals excelled in, we have a new institution, of luxury and extravagance but which, in any event, was directly related to the prevailing winter climate in upper India and thus had a legitimacy in construction. It should be noted that the concept of a *hamam* was directly related to a permanent water source nearby, either natural or contrived. We have examples of both. For example, in the *par excellence* creation of this kind inside the citadel of Red Fort, Delhi, this was related to Nahr-i-Behisht starting from a water well in the northwest corner of the Hayat Baksh garden, further to the west of the *hamam*, where alike a cisterrn which will control the water supply in the channel, as a liftwater arrangement from the Jamuna (in period of summer when the water level may go down) existed and the same *hamam* was to be provided with alternatively cool as well warm slabs for lounging, inside the *hamam*, as necessary during the seasons. This *hamam* was the creation of Shah Jehan here and hence was lavish in its articulation and organisation, divided into several specific chambers in a specific order from the hot water supply cistern to the outermost dressing chamberwhere from one could walk across to the *Diwan-i-Khas*. The pavement was in perfactly dressed and inlaid marble of the finest translucent shade and thickness to suit variously the floors, cisterns with slabs sealing them and receiving the

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steam for below and getting warmed up, and the open channels which would carry the supply both for oral bath or for general central heating of the chamber respectively. The chambers themselves were spacious, with walls also lined by marble or fine shell plaster, and access is given in such a way from room to room that it ensured proper privacy, since the *hamam* was intended for both the male and female members of the royal family. There was nothing that produces a jarring note and the pleasure-cisterns and fountains also add up to the enjoyment and amusement. It should be noted that much State transactions were sometimes made while the royalty is engaged under the hot vapours of the chamber. It was in one such salubrious and sensitively private circumstances in the *hamam* created, along with other pavilions and *baradaris*, again of the fine marble, on the Anasagar lake bund at Ajmer, during the time of Jehangir, that this king interviewed and approved of proposal for Sir Thomas Roe for certain trade locations and benefits on the Salsette Island (around modern Bombay) and Surat, requested for by the English East India Company. It was an index of both the relaxed mood of the Emperor and the adroit insight of the commercial —minded English Company to have sought out the Emperor's interview, just in such a context, for underplaying the serious implications of the transaction being put across.

Jehangir's *hamam* arrangement, in another place at Kangra, Fort, just outside the gate near the natural brook that wends past the declivity here was, again, a charming example of this nature lover's passion for aesthetic judgement. It was, however, of rough dressed rock merging with the lands cape. In so far as Babar, the first Moghal whose passion for gardens we have already noted, was concerned, we have a remarkable example of the layout, part-natural and part-artificial near Dholpur near Bari Road, at the village Jhor, laid along-side Sikandar Lodhi's reservoir here. This village is located on the rocky flats (of good quarriable sandstone) which form part of the village habitation and with two large lakes near by, one called Niloufur lake, (by the blue lilies that stud it) and the other an artificially bunded lake-the work of Sikandar Lodhi, provided with an embankment comprising spacious water-front stepping and a sluice gate with inspection chambers, flight of steps etc. and with water moving out of the barrage for constant supply in a stream, on the banks of which, in line with the sluice and the village, a mosque was also built. In the village itself, on the rocky flat, a most beauteous layout of a terraced water channel, complete with cataracts, cascade screens, fountains and leading channels on the edges, was created, led simultaneously to a *hamam*, standing in a single large chamber divided into two parts and provided with all the minimum manipulations of a perfect hot bath device. We would do well to quote Babar's own words (as recorded in his camp diary) regarding this early exploratory undertaking to note how much of personal satisfaction it gave to this ardent patron of the open-air luxuries of nature.

"(August 24th) on Friday the 24th of the same month, we set out to visit Dholpur. The night I slept at a place half-way, reached Sikandar's dam at dawn, and dismounted there.

"At the end of the hill below the dam the rock is of building stone. I had Ustad Shah

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Muhammad the stone-cutter brought and gave him an order that if a house could be cut all in on a piece in that rock, it was to be done, but that if the rock were too low for a residence (*Imarat*)., it was to be levelled and have a reservior, all in one piece, cut out of it. (20 Sept., 1528).

"That place is at the end of a beaked hill, its beak being of solid red building-stone (*imarat-tash*). I had ordered the (beak of the) hill cut down (dressed down?) to the ground level and that if there remained a sufficient height, a house was to be cut out in it, if not, it was to be levelled and a tank (*hauz*) cut out in its top. As it was not found high enough for a house, Ustad Shah Mohammad the stone-cutter was ordered to level it and cut out an octagonal, roofed tank. North of this tank the ground is thick with trees, mangoes, jaman (*Eugenia jambolana*) all sorts of trees. Amongst them I had ordered a well made, 10 by 10, it was almost ready, its water goes to the afore-named tank. To the north this tank Sikandar's dam is flung across (the valley), on it houses have been built, and above it the waters of the rains gather into a great lake. On the four-pillared platform (*talar*) to be cut out in the solid rock on the same side, and a mosque built on the western one.

"(Sept. 22nd and 23rd-Muh. 7th and 8th) On account of these various works, we stayed in Dulpur on Tuesday and Wednesday.

"After the mid-day prayer we rode on, at sunset passed the Chambal-water, between the evening and bed-time prayers, entered Dulpur-Fort there, by lamp-light, visited a hot-bath which Abu'l-Fath had made, rode on, and dismounted at the dam-head where the new *char-bagh* is in making. "Oct. 5th) having stayed the night there, at dawn (Monday 20th) I visited what places had been ordered made. The face (*yuz*) of the roofed-tank, ordered cut in the solid rock was not being got up quite straight, more stone-cutters were sent for who were to make the tank-bottom level, pour in water, and by help of the water, to get the sides to one height. They got the face up straight just before the other Prayer, were then ordered to fill the tank with water, by help of the water made the sides match, then busied themselves to smooth them. I ordered a water-chamber (*ab-khana*) made at a place where it would be cut in the solid rock; inside it.

(Jan. 9th) on the eve of Sunday the 28th of the month (Rabi II), we crossed the Jun (Jumna) at the 6th *gari* of the 3rd watch (2.15 a.m. and started for the Lotus-garden of Dulpur. The 3rd watch was near (sunday mid-day) when we reached it. Places were assigned on the border of the garden, where *Begs* and the household might build or make camping-ground for themselves.

"(Jan. 13) on Thursday the 3rd of the first Jumada, a place was fixed in the southeast of the garden for a hot-bath, the ground was to be levelled; I ordered a plinth (?) *kursi*) erected on the levelled ground, and a bath to be arranged, in one room of which was to be a reservoir 10×10.

"(Feb. Ist) on Thursday, after writing letter to be taken by those going to Kabul, the buildings on hand at Agra and Dulpur were recalled

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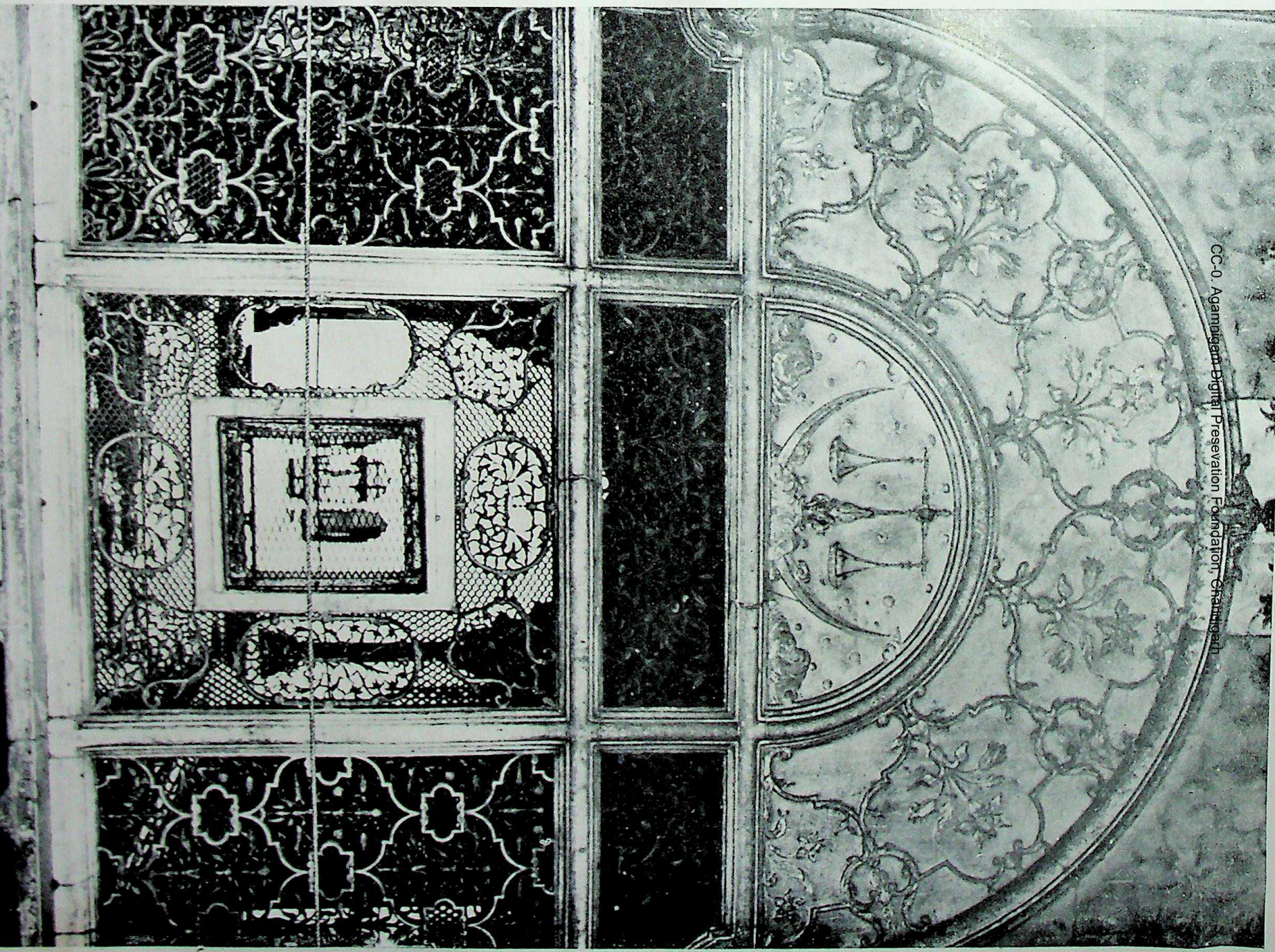
to mind, and entrusted to the charge of Mulla Qasim, Ustad Shah Muhammad, the stone cutter, Kirak, Mir Ghias, Mir Sang-Tarash (Stone cutter) and Shah Baba, the spadesman. Their leave was then given them".

Hamams by others

Shershah, who had blazed his own trail in politics against the early Mughals had recorded mighty architectural creations in his mausoleum at Sassaram, for his Qila-i-Kuhna mosque and fortifications additions at Purana Qila, Delhi, also had to his credit a Hamam at Sassaram which, according to to historical chronicles, of the post-Mughal times by English antiquarians had stood close to the Grand Trunk road, but is now tucked in the heart of the market road of Sassaram town and is all but built over and exterminated. However, the layout plan of the Hamam, as was evident till recently, showed a perennial well, a heating chamber, a bath room and a large courtyard beyond, for some fountains and ponds and for additional rooms for baths, all built with brick and stone work and sandstone veneering in arcuate style. It is said to have been favoured even two centuries age by weary travellers on the Grand Trunk road who halted in the *caravansarai* near by, took bath in the *hamam* and after refreshing themselves, continued the journey. It would only to go show how, despite the political rivalry and his otherwise noted preferences in architecture, mostly of the Sayyid-Lodhi models, Shershah had imbibed this special luxury of Mughal life and had incorporated it in his Sassaram creations. The *hamam*, though of rather modest dimensions, had clearly followed the Mughal pattern and had it survived in its proper environment, perhaps, would have shown other relevant parts of the *Sarai* as well-all of which the rapacity of the modern life style had unceremoniously overwhelmed and obliterated for residential structures of the most indiscriminate and insignificant style at this historic Sassaram.

95. Balance (*tarazu*) motif and *jali* partition at *Tasbih khana*, Lal Qila, Delhi.



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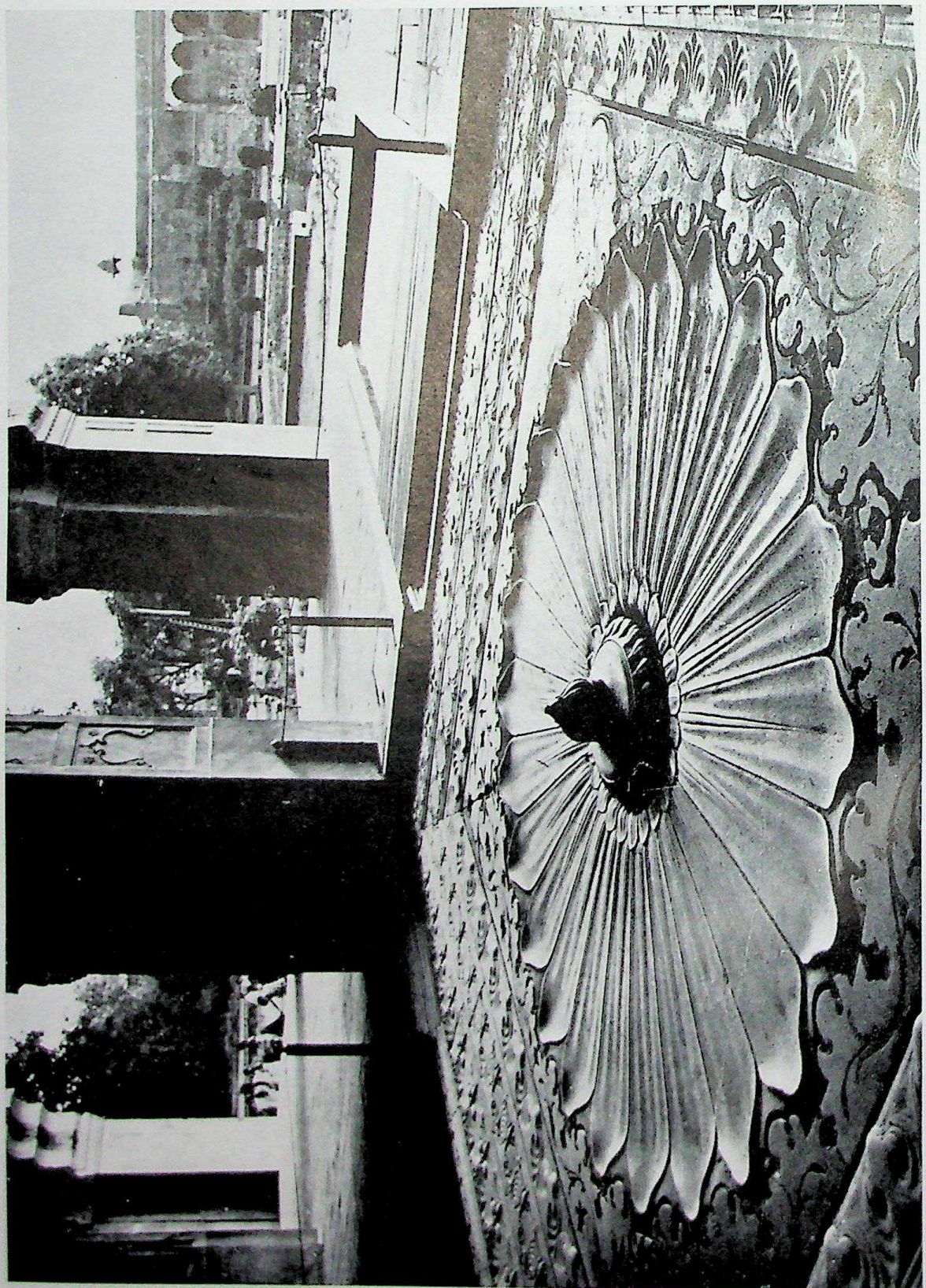

96. Nahr-i-Behist, Royal Apartments, Lal Qila, Dhlhi.

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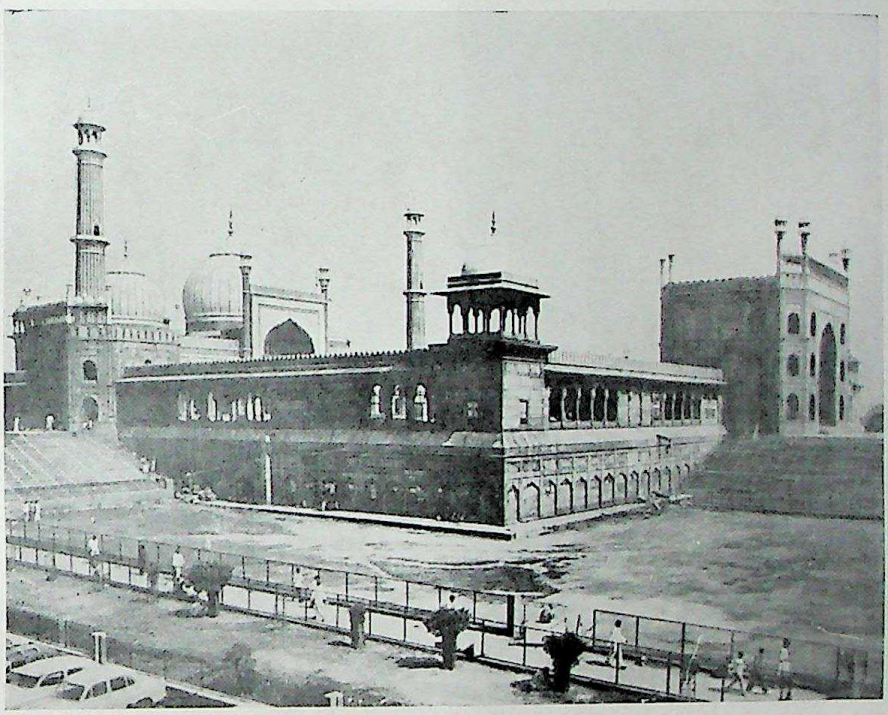
97. Jami Masjid Lal Qila, Delhi.

98. Mausoleum of Safdar Jung, Delhi



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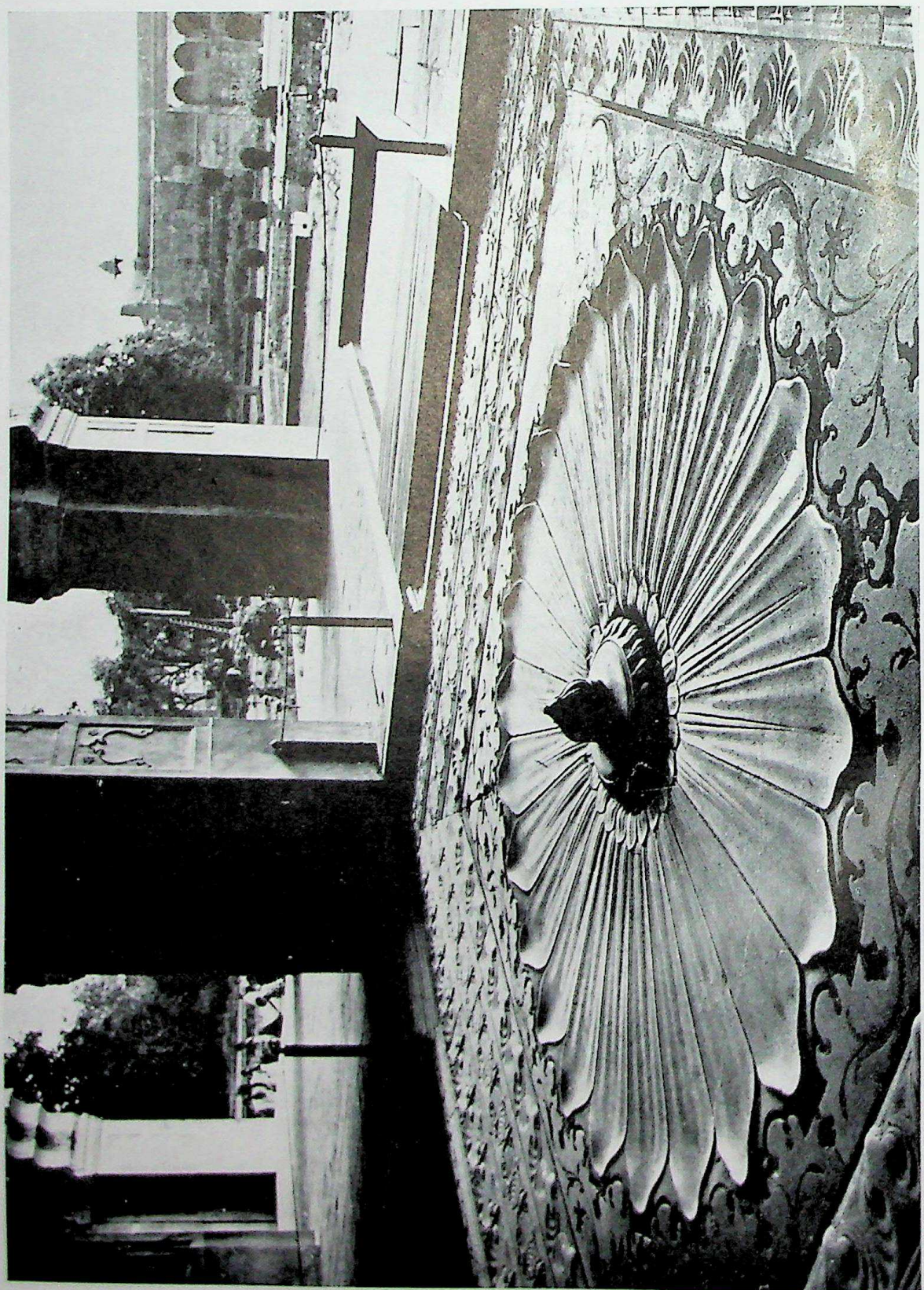

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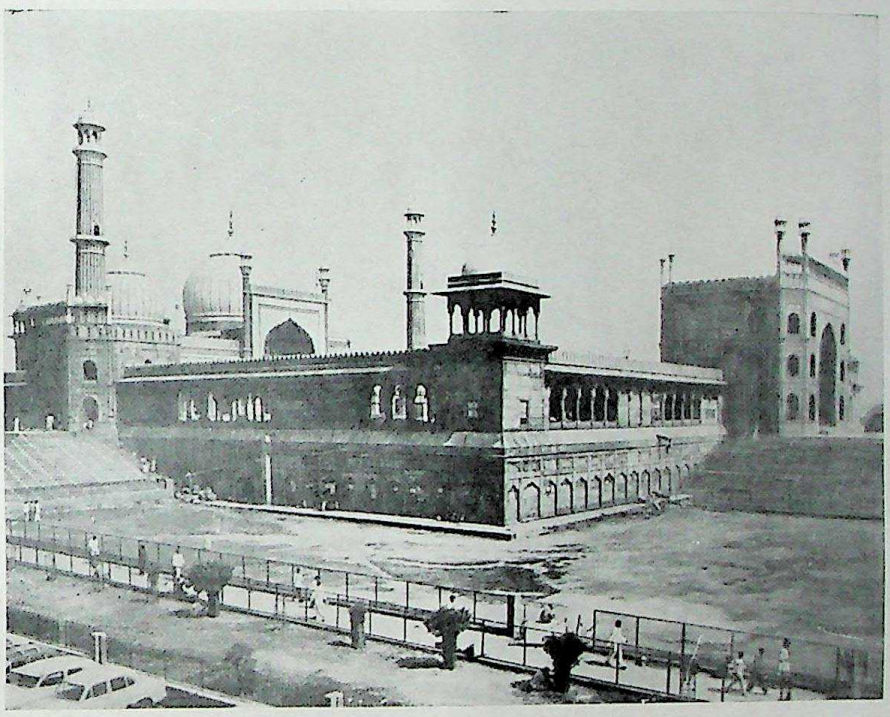

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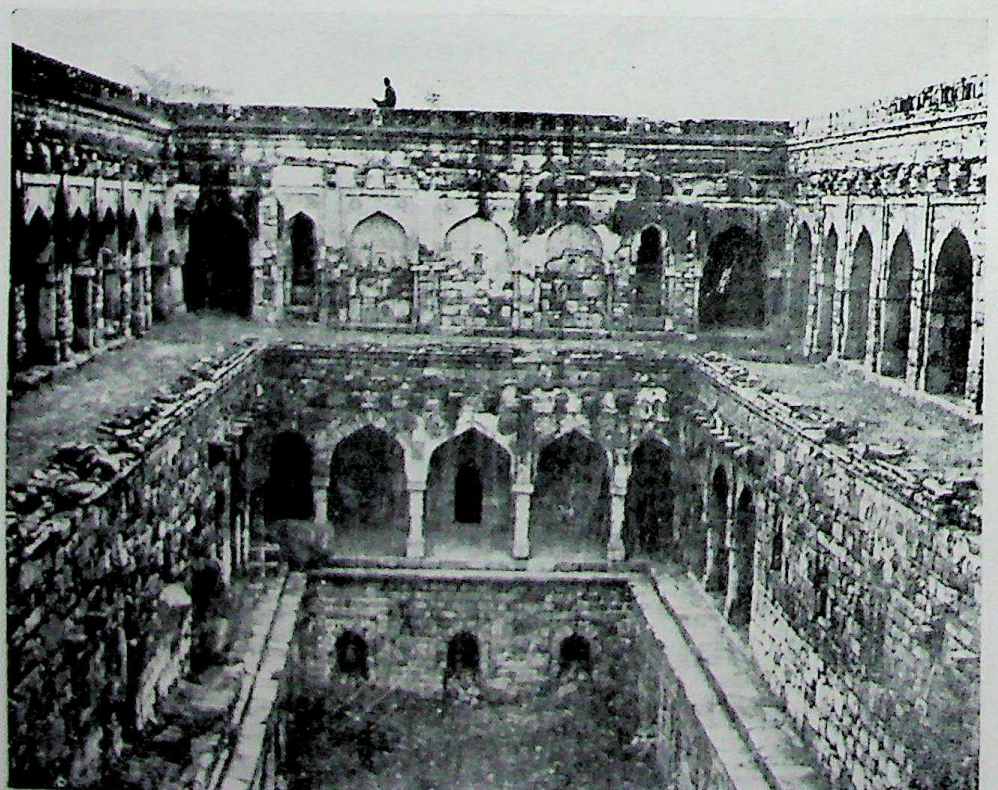
99a. Gandak-ki-Baoli, Mehrauli, Delhi.

99b. Rajon-ki-Bain Baoli, Delhi.



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Nine

The Regional styles

(i) *The Bahmanids*

Daulatabad of the Yadavas, as already mentioned, was the '*el dorado*' for Allauddin Khilji and Mohammad Tughlaq and several expeditions were sent to subjugate Daulatabad and Warangal including the whirlewind campaign of Malik Kafur over the whole of the South during the Khilji times.

The Jami Masjid at Daulatabad (c. 1318 pl. C) could possibly be the earliest mosque erection in the Deccan and is set in a two hundred feet square court, with a sanctuary and three entrances on the three other sides of its outer enclosure. Its prayer chamber has one hundred and six pillars, divided into twenty five aisles in five bays and is roofed by a central large, flattish corbelled low dome, comparable to the Khilji dome stage. The corner buttresses are fluted in sections and have a mild batter. They distinctively belong to the Tughlaq vogue, and together with Karimuddin's mosque in Bijapur and Chand Minar at Daulatabad become the very first efforts at religious architecture for Islam in the Deccan, entirely imitating he initiative of the Imperial rulers of Delhi.

The elements that are the new introductions in the architectural conspectus in the Deccan at Bidar, on the other hand, are both quantitative and qualitative. It should be seen immediately that the heavy laterite core of defensive (and to some extent even secular) architecture at Bidar draws from the copious on—the—spot availability of laterite in this tract, right at Bidar itself. In fact the Bidar fortifications which seem to have emerged in two stages, one that of the inner citadel and the other city wall, reflect a change in the pattern of fort construction. Taking full advantage of the declivities in the rolling laterite upland of Bidar, the citadel assumes a high point in its inner residential and other special public apartments, leaving a natural valley in a large part of its circuit to separate it from the town fort. Certain structures of considerable dimensions, such as the *Barudkhana* or armoury were also located outside the citadel but still close to it on the high ground overlooking the natural valley. The palaces and residential apartments are located towards the southern edges of the citadel overlooking a large open area in front of them. These latter buildings are accessible both through the residential area as well as outside it by a skirting passage, while the celebrated *Sola Khamba* mosque measuring two hundred and ninety feet by eighty feet in nineteen aisles and five bays and massive circular facade columns, was made a part of the residential royal area.

It is seen that three distinctive palace remains, namely, Tarkash mahal, Nagina mahal and

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Rangin mahal were located in a row, although the last mentioned was made nearest to the inner gateway entrance of the main gateway complex into the citadel and was also the latest of the three, belonging as it does, to the Baridshahi rule in the latter part of the 16th century A.D. The first mentioned, especially the former of the two is very ornate with multi-storeyed character and with elaborate stucco plaster ornamentation on the *kanguras* especially of buildings, and aesthetically breaking the skyline. A limited garden, with cascades and channels is situated in its front further frugally enhancing its setting. The domes are all of the stalactite pendentive type in a simplified scheme, besides including arches which show a structural cross-beam at the springing level and thus seem to have been drawn from the typical late 14th—early 15th century buildings of West Asia. The core is made of rubble stones of schist rock which had elsewhere, in almost all the buildings of secular type, been extensively utilised in dressed courses as outline-frames for wall sections, including those which have been profusely decorated with tile work, typical of 'Kashan' craftsmanship of Persia. Structural construction here for the core had been of fairly well dressed and coursed slabs which have been interleavened at the lintel level at several places, by lime-concrete courses of some thickness. The floor and plinth stones are also of the schist rock of greyish colour and smooth texture. The domes assume a single dome form of impressive size with no squinch system employed anywhere but only of the more advanced pendentive types. Only in the dome of the *madrasa* of Mohammad Gawan in the town, of the 15th century A.D. we find the use of a highly stilted double—dome arrangement, so essential for the high rise of the main ceilings themselves, as in its main western section which is single storeyed, while the multistoreyed College and Library wings show other varieties of single dome types. The lofty *minar* is entirely covered with the tile work. The use of ribbing diametrically along the curvature of the dome-which was an exotic feature and is used in Delhi in some of the Firozian buildings but using mortar ribbings only, are uniformly employed in most of the monuments of the 15th century at Bidar. Another interesting feature is that there is a central lid pendentive on the crest of the ceiling, made of ornamental soap stone. This is an integration of the indigenous craftsmanship with that of an Islamic arch-construction in which the crest is not left as an aperture.

Two interesting hall-marks of the *Sola Khamba* mosque are the use of high central pentagonal *mihrabs* in relation to somewhat lesser heighted side ones, with the cusped and ribbed half-dome in the upper section and engrailed arch fronted lower section which also show the cross beam at springing level and stucco bracket of very ornate and elaborate workmanship which links the arch-jambs to the upper dome springing level in a raised elephant-trunk pattern-which is elsewhere also seen in the tomb of Hazrat Gezu Daraz (Banda navaz) and on a tomb to the east of the Chaukhandi of Shah Khalilulla, both at Bijapur. These are to be studied also in comparision with the use of fully wooden bracket series in Rangin-mahal portion with an all wood-and-pillar and ceiling scheme. The workmanship, alongwith the most classic and intricate work of mother-of-pearl inlay ornamentation and mosaic stone and plaster moulds in the innermost chamber axially of this building (Rangin mahal)

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recalls the workmanship at Jehangiri mahal at Agra and in the other Akbari buildings like *Diwan-i-khas* etc., at Fatehpur Sikri, along with the elaborate ornamentation of pearl-inlay of Salim Chisti's *Dargah* there. They are clearly, thus, inspired by Persian craftsmanship at Bidar, in scheme as well as in detail and material, and would be relatable to Jehangir's or late Akbar period within India in time, along with a direct Persian/Turkish external influence, becoming historically and artistically valid. Further, even the glazed tilk work as in *Diwan-i-khas* as Bidar relate in design and detail to the *Nili chattri* outside Humayun's tomb and other monuments in Delhi, and would thus be, though an Indian work, perhaps by imported craftsmen, as they are very extensively used by them in Bidar citadel and in the Bahmanid tombs at Ashtur which are all clearly pre-Mughal. Quantitatively also, these are more profuse in the Deccan than in the Mughal upper Indian monuments. The preparation of the core plaster mould for the design is pre-planned ande xplains the very intricate stucco plaster carvingsalso which form an ubiquitous part of the buildings here, both externally and internally. Above all, the elagantly relieved and multi-turreted, balconyed and crenellated tops of the external face of the citadel wall, especially along the palace series on the outer facade, would show clearly that the Bahmanid and Baridshahi rule was one of peace and prosperity without any serious political disruptions, despite considerable palace intrigues recorded. They recall also, in their defence architecture some commonness with the late Vijayanagar examples from Hampi, Chandragiri, Vellore etc., and even in Hindu forts of later period, and thus represent the style of the age, where even Hindu cities had been influenced by Deccan Islamic style in India, and where even military architecture for the fort assumes an exultant aesthetic frame, characterizing the confident expansionism of the Bahmanis, different from the massive and grim stereotyped fortifications of the earlier periods of Delhi-which are formative, rigid and ponderous. They excel, in this aesthetic regard, even the Mughal military monuments and fort etc. The use of excessive mortar and stone in the construction of the core of the building would show the general Islamic mode right through, but is more disciplined only the Mughal buildings. It should be noted that Bahmanid rule in the Deccan, first in Gulbarga and then in Bidar, and ramifying further into Daulatabad, Golkonda and Bijapur, through chieftains of Turkish, Persian and Muslim extraction established a new trend in polity as well of sturdy independence from Delhi Imperial rule, a genuine interest in the welfare of the people-whom they clearly divided into those for whom *Sharia* laws will apply and those to whom it would not apply but only common laws would be applied. The Bahmanis indeed established justice courts of a simplified pattern for non-muslims, where Hindu pandits were also consulted and they did not show excessive zeal also in proselitization. In fact, even several of the royal Hindu princesses of the Sultans of the Bahmanid house were permitted to follow their own caste customs and an interest was also taken by the Sultans in their observance of these. Learning, arts, education, administrative reforms etc. were given special attention by kings and their ministers-the latter of whom comprised erudite and noble examples as those of Mohammad Gawan. The kings themselves relied much, for military assistance, spying and general security, on a variety of exotic groups—even including

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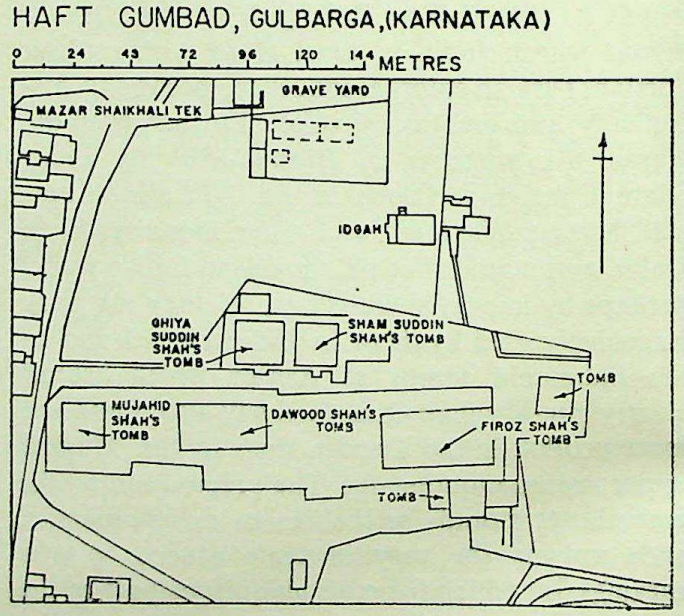
67. *Haft Gumbad complex, Gulbarga.*

mercenaries called *afaquis* resulting in a multi-racial and truly secular atmosphere prevailing, notwithstanding the clear commitment of the kings towards an Islamic hegemony. Constant common cause with Hindu kingdoms, to thwart both Imperial Delhi expansion, as well as those of the neighbouring kingdoms of Malwa, Gujarat etc. and also the activities of errant or delinquent muslim subordinates, were also seen, resulting in the people as well as the neighbouring states getting fully accustomed to the stability of the Bahmanid rule. The result was admirably seen in architecture and ornamentation where the entire style is a persuasive Turko-Persian-inspired model, though with a certain degree of local features. The buildings are notable for their well ventilated and high arched character with enough space and vertical elevational grace imparted to the structural lay-out. The thickness of the building was much reduced by the introduction of staircases in the core of the wall and by windows even on the drums of the domes. This, however, may also show an accent on security and absence of gracious life in royal palaces. Above all, tile-work craftsmanship became an obsession, at it were, indicating the presence of enough craft expertise in the court and in the realm, receiving adequate patronage and encouragement. There is indeed considerable elevational variation of volume and outline in the Deccan Bahmanid monuments, which each of these royal houses further distinguished by a distinctive formula for arranging the main dome with reference to the rest of the roof, the corner *minars*, cornice styles, raising of the groundfloor wall faces into a stilted kind-the purpose of which all appears to organise the area and height of these buildings, besides giving space for cut-plaster ornamentation. The smooth curves



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and dome-styles of the interior introducing several innovations in spandrels, pendentives, and *mihrab* decorations form a contrast to the linear rhythm of the exterior outlines, wherein, polygonal outlines are well harmonised with linear and hemispherical parts. The inspiration of the early Bahmanid trends, as at Gulbarga, (Fig. 67) is enriched further in the advanced Baridshahi monuments at Bidar and Ashtur and are carried forward to still more innovative formulae in the Adilshahi and Qutb Shahi structures. Even the relatively short—lived Nizamshahi and Imad Shahi rulers of Ahmadnagar and Vidarbha created interesting integrations of indigenous Hindu craftsmanship with Islamic modes, and seem to have achieved a common pool which should have attracted Akbar and Jehangir's attention also, when they themselves started experimenting in the grafting of Hindu craft-expertise with truly Mughal concepts. It could be seen clearly that after the Tughlaq rule had been successfully thwarted and overcome, Deccan under the Bahmanids become the most deliberate practitioner in the development of Islamic architecture both secular and religious, and created a nucleus for the entire Deccani zone to partake in, as different from the central Indian, Gujarat and upper Indian usages. It can thus be stated that, excluding Gujarat and Bengal, where the concepts were firmly moored in the indigenous patterns predominently, the Deccani Bahmanids alone provide a fitting foil to the rapid advancement southwards of Islamic architectural modes and models of upper India so that they form a zone for meaningful evolution of the Islamic religious architecture with local raw materials and genius, inspired by truly Persian and West Asian antecendent trends flowing into their kingdoms by a movement of scholars, technicians, traders and religious leaders, finding a new haven of patronage and adventititous scope for peaceful penetration. The era, after the second quarter of the 16th century A.D., truly finds Deccan more flourishing in building styles than even upper India-where the Mughal style was virtually holding a monopoly in art and ornamentation-and stem the advent of this monopoly into the areas south of the Vindhyas, a situation which changes only after the middle of the 17th century A.D. when the rule of the Sultans in Golkonda and Bijapur particularly, grinds to a halt, by the successful political thrust of the Mughals.

It would thus be unrealistic to call the Deccani styles 'provincial', as these zones are primary sources of initiation, growth and fulfilment, without any special catalysis from upper Indian trends, both in form and surface treatment. Besides individual monuments, group compositions, the like of which are not seen except in the period of Shahjehan—as in the Khusru Bagh group at Allahabad-become more common in the Deccan, as in the Haft-gumbad, at Gulbarga; royal tombs at Ashtur and Bidar and at Golkonda. Even uniquely paired turin-domed chambers are integrated into one block, as was seen in the Bahmanid tombs. The very idea of selecting a separate place for the royal mortuaries seems thus to be a Deccani norm and this appears to have been inspired by extra-Indian usages. The variations in mosque modes are also nowhere so impressively seen, as in the Deccan. The introduction of *madrasas* and Jami Masjids is nowhere as profuse and profound as in the Deccan. For the first time, the Hindu kingdoms around the Deccan in the south and the Mughal empire in the

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north, find it inevitable to live with the exultant, creative and majestic art concepts—which were their own monopolistic and exclusive pride in their respective religions till then. If the Islamic architecture of the formative centres in Delhi from the beginning of the 12th century to the late 15th century A.D., could be called experimental, discrete and slow, the rise of the Deccan architecture from the latter period to the second half of the 17th century was phenomenal, profuse, organic and monumental, integrated well with the populous towns and without any corresponding stifling of the indegenous creations. Thus the south, west and east of India, were witnessing politically and sociologically more propitious circumstances which effectively bifurcate our attention to the development of this architecture, between the Imperial Delhi, on the one hand, and the independent and prosperous kingdoms of the same Islamic movement, on the other, in these three zones especially in the Deccan. The harmonious and well administered empire of the Mughals was roused to a competitive conflict with these equally harmonious art havens in Deccan, Gujarat and Bengal, and a trend for a *second* military expansionism under the Mughals to swamp these exultant collaterals was thereby motivated. This also drove the Mughals to integrate their own artistic expertise, with the Hindu Rajas of upper India to make common cause with them, by establishing a vigorous and persuasive court-art in miniatures, calligraphy and stone craft, in order to rise superior in subtlety and artistic grace to the admittedly regional as well as local verve of these three contenders to the west, east and south.

What we know of the Mughal architecture itself in the Deccan, Gujarat and Bengal from the middle of the 17th century A.D. is, however, in the ultimate analysis, colourless, secondary and stereotyped order both in secular and religious structures, the treatment having been mostly in brick and lime, though with a sober delineation of the overall outline. The high noon of the Deccan, Gujarat and Bengal was clearly in the *Pre-Mughal* times there, in the period *prior* to the second half of the 17th century A.D.; thus, notwithstanding the firm political control achieved eventually by the Mughals over these three regions, the individuality in art of the local co-religionists and the enterprising or exotic craft strains integrated already in these areas gets stifled yielding place, on the other hand, only to a custom-made Mughal building formula. The plains of the north surely helped in highlighting the splendid and harmonious, formal and aesthetic creations of the Mughals there, and to some extent, achieved also a *niche* of their own, in Gujarat and in Bengal, after the Mughal alarums and excursions were over there, but Deccan, with its rugged terrain and polyglot socio-cultural mosaic, was able to hold up its Bahmanid pool of art creativity, on a more distinguished pedestal than that of the Mughal successors. It was in the Deccan, thus, that Imperial Mughal art *penchant* suffered a conceptual deterioration in status, when studied amidst and against the robust, innovative, and cross-fertilized Islamic art-spectrum of Deccan which was overpowering in it character. While Deccan thus lost its physical terrain to the Mughals, these (latter) conquerors of great pedigree lost ground in artistic *elan*, and stood stultified thus in their expansion there.

An interesting feature, however, that not only differentiates the Deccan monuments from those

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of Delhi and environs, in general, but also the Mughals, in particular is the almost studied underplaying, if not avoidance. of a central layout and landscaping concept that was so much a par. of the Mughal creations. It is again and again seen-whether it was in the Bahmanid monuments or the other regular styles like Baridshahi, Qutb Shahi, Adil Shahi, Nizamshahi or Imadshahi monuments, and even in the monuments at Bayana and elsewhere nestling within the very fostering eye of the Imperial Delhi powers-that garden layout or even a central location for the monuments with a creation of a spacious open space in front had not been assiduously cultivated, notwithstanding that in the Deccan also, exotic strains had been so eloquently present, as seen from historical as well as architectural data. One does not really consider the absence of the garden or space-landscaping in the Deccan structures as due to a paucity of talent or inspiration. It may be said that architecture, in the hands of the Deccani builders, was only a *means to an end*, whereas under the Moghuls, it became *an end in itself.* Consciously cultivated aesthetics and visual harmonization of horizontal and vertical components of a structure in a complex was a passion with the Mughal architects; whereas, creation of buildings which just adequately symbolize the culture, stamina, prosperity, peace and individuality of the regional powers of the Deccan, (besides their serving as effective vehicles functionally for the purpose for which the structures were built) was alone seen as more appealing to the Deccani royal builders. It is not as if garden or any leasure resort of that kind in residential areas was totally absent. We see these at Bidar, Gulbarga, Mandu, Ahmadnagar, etc. But the general urge was rather to integrate nature with nurture, and rather play upon the *existing* landscape, than culture it by artificial expedients. This appears to be endemic and pathological and due to the natural hill and valley topography of the Deccan where nature plays its part, whereas in the flat northern places, artificial expedients for landscaping are inevitable to balance the extreme rigours of nature and a prevailingly flat terrain.

It is also sometimes as much astounding as enigmatic to the aesthetic eye that even the grand and magnificent creations like Mohammad Gawan's *madrasa* at Bidar or Ibrahim Rauza at Bijapur or the Bahmanid *maqbaras* at Ashtur had been built almost at street level without any worthy foreground, and surrounding space, almost like street houses, and without too much care for their distinguished locations as would be warranted by their exceptional conception, size, and execution of style. On the other hand, even in Aurangazeb's time, the Bibi-ka-Maqbara-which artistically may not have a fraction of the grace of the Taj though built around the same decade more or less-had to be inexorably located in a strictly conventional garden format with impressive auxiliary parts and finite boundaries. This would only show that the *ethos* of the Deccani Muslim dynasties was markedly different from that of the Mughal, and in their own context, they would emerge more unsophisticatedly attuned to their surrounding environment and are not to be cavilled at, in contrast to the trend-setting, methodical and studious art-connoisseurship that was so much a vital part of the Mughal court life and Imperial prerogatives. Also, by personal preferences and historical acumen, the Deccani kings were lesser devotees of the muse of gracious life, though not of art itself, and could

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not cultivate the spacious outlook, *penchant* for environmental rhythm and dimensional harmony, that the Mughal monuments so insistently portray. Craft excellence was well matched in both, but excellent craft was, as it were, veiled or camouflaged by casualness in landscape-planning. It was, thus, more like a sweet, bashful maiden artlessly left to her own native devices in her apparel and deportment, while the Mughal structures were like a groomed court dancer, with the full repertory of natural and artificial blandishments, and dressed to kill.

(ii) *Gujarat regional style*

In western India, where indeed Islamic settlers had been seen from the 9th century onwards in good number, for trade, after the Arab conquest of Sind earlier, the Gujarat zone had been the cynosure of attraction for Imperial invaders, beginning with Mohamud of Ghazna, by successive expeditions, with an eye on the fabulous wealth and splendour of Hindu religious centres like Somnath. These invasions had considerably shattered the general morale of the people and the indigenous rulers-the last of whom were the Vaghelas, ruling still from Anhilwad-Patan (or simply Patan), notwithstanding the exemplary heroism and craft zeal evinced by the region, as seen in the patronage and superb artistry of the innumerable temples erected all over the land, both in hinterland Saurashtra and mainland Gujarat. Thus, after the end of the 13th century and in the early 14th, the Imperial rulers of Delhi also, under the Khiljis and Tughlaqs successively (1298-1407) conquered and administered this area from Delhi, leading ultimately to the rise of an independent Sultanate of Gujarat (1408-1573) ruling with great purpose, until the area was duly brought under the Mughal Subedars or Governors (1574-1758). In the period between 1380 and 1408, the Afghan Governors, beginning with Alp Khan, a brother of Allauddin Khilji's queen, and ending with Malik Mufarrah, the capital continued to be at Patan. The Gujarat Sultanate, however, built its own capital on the Sabarmati at Asawal (ancient Karnavati), now overlapping with the modern city of Ahmedabad, of rectangular shape, with three gates on its three sides, and the river flowing on the fourth side. This citadel is now called Bhadra citadel. They were to expand quickly into a whole city by a fortified area of ten kilometer circuit, adorned by twelve gates, one hundred and thirty nine towers and over six thousand bastions, according to Mirat-i-Ahmadi, and divided into three hundred and sixty populous *mohallas*.

The pre-Sultanate erections are largely to be seen at Patan, Broach, Cambay, Mandal etc. These, where like the first mentioned place having Sheikh Farid's tomb and mosque are incipient, of reused earlier structures, have their own characteristics in the form of open pillared frontage, flat and often domeless roof, ornate pillars and interior ceilings of Hindu style or material and entirely trabeate in construction. They have no *minars*, arched frontage or elevational variations in levels. In these, they largely copy such examples, as at Dhar, in the Lat-ki-Masjid or the Kamal Maula masjid (Bhojsala) where the context as well as initiative was similar, except that the ornamentation in Gujarat

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trabeate Islamic style, in these early stages, is in no way different from the Hindu temples, with the avoidance only of image carvings. In Jami Masjid, Broach (13th. A.D.—pl. CII) some of the ceiling beams and domes have carried even the original Hindu carvings (now reused and in so doing they are often hidden under a plaster coat to suit an Islamic sentiment—however disingenous it may be). Only in Jami Masjid at Broach and Mandal (pl. CIII) again, a direct involvement with Imperial Delhi becomes apparent, as its design is largely based on frontages such are found at Bayana or Kaman, with stilting of pillars so as to acquire height, as are also found at Arhai-din-ka-Jhonpra at Ajmer. Besides, those were outlandish borrowals from these regions, and these constitutent elements are given the go-bye when the Sultanate began its own structural programme when a new design emerged and consistently held the ground for nearly two centuries more.

The Gujarat style is almost totally trabeate, except for a few erections in arcuate style as late as in the period of Aurangazeb, as in Sardar Khan's *Rauza*, with its onion-shaped bulbous dome; or in a deliberate introduction of a different regional bias by immigrant trends, as in the case of Mohamad Ghaus Gwaliori's tomb, in its interior arcuate mannerisms with its groined arches and carved pendentives and almost flat roof. The standard Gujarat mosque has a prominent arched central part of the facade, provided in its early stages, as in Ahmad Shah mosque and Jami Masjid of his time, with an engrailed-arched spanning for the outermost four pillars of the central axial bay, seen elsewhere at Bayana. They had *minar* buttresses on either side of the central tall arch of the facade, which were masterpieces in indigenous craftsmanship and of Hindu design. This *minar* first starts in Gujarat only with Hilal Khan Ghazi's brick mosque at Dholka (1333) and is thus an early pre-Sultanate local experimentation in brick-and-plaster mosques, though of large dimensions. The *minars* did not rise above the terrace level in the early period, and then in Beghara times shoot up in lofty, storeyed and balconyed columns and gradually become more and more slender subsequently, and also shifted to the extreme ends of the mosque facade. The peripheral domes are many, high lighted by a central larger dome occupying the intersection of the axial and tranverse bays in the middle and in a clerestoreyed rise for ventilation and light and more massive than other domes. The *minar* buttresses have a prevailing multiple-offseted circular character, although, in germ idea, this should have been influenced by the Jaunpur and Sayyid-Lodhi styles of Upper India, proving how the Gujarat craftsmen have the capacity to imbibe traits but converted them into their own chosen idioms and mannerism fitting with their style, in the totality of conception. In comparison, the blatantly massive pro-pylons of Jaunpur are less attractive than the beautifully engraved mouldings of the Gujarat mosque *minar* buttresses. The choice of raw materials for the Gujarat monuments is also consistently of only fine grained sandstone and only rarely they show marble or black stone, as for the simulation of the prayer mattress (*namazgah*) on the floor in the innermost bay of the central part of the sanctuary, as in Rani Rupavati mosque (*c.* 1500). Their other resourcefulness extended to the step-well and inlet-sluice architecture, so famous in the Solanki period of

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Hindu kings, as in Bai Harir Sultani's well (*c.* 1500) or the inlet-sluice at Kankaria lake (*c.* 1451)—(where in the *baradari* in the middle of the lake, Jehangir stayed for sometime when he was the Governor of Gujarat) or in the inlet sluice of Sarkhej tank mid—15th to late 15th century A.D. or elsewhere, as at Khan tank at Patan (15th century A.D.). That several elements which are not native to Gujarat craft had been so dovetailed into its organism as to produce an inherent harmony is apparent. Jaunpur, Mandu and even far off Bengal had been contributors in several small motifs and usages. The fluting on the shaft sections of *minars* have seemingly drawn their origin in the Bengal style of the pre-Eklakhi period. Similarly, fluted domes are also seen in Mandu. The introduction of short, slopy continuous cornices are again, quite unlike the massive cornice types seen in native Gujarat temples and the deliberate curtailment of its droop is to give the facade a sprucer frontal look. The multiplicity of domes in various sizes is, however, special to Gujarat and presents, in the aggregate, a pleasingly suffused *crescendo* silhoutte to the skyline and is indeed variegated also in cases where the clerestorey has been raised too high and its superincumbent large central dome, too strident, as in Jami Masjid, Champaner or Shahpur Kazi's mosque, Ahmadabad.

It is only in the Gujarat style, again, that we find a disciplined integration of both solids and voids, of architecture and ornamentation, of variety and convention. It will be difficult to question the trabeate methods adopted in this region and its general rejection of the arcuate predominance—an imperative in Islamic architectural enunciation—because the different elements of the erstwhile Hindu architecture had met every problem and requirement, whether of stability, or ventilation or illumination, so that despite the rather crowded and distracting pillared array in the interior, the basic layout of both the exterior and interior have been found quite adequate. Besides this design has been endorsed by all their own Islamic patrons. *Mihrabs* came for special decoration and rich ornamentation in which again, chain-and-lamps, festoons, geese, etc., formed favourite ornamental motifs. Between Ahmadabad and Champaner (Fig. 68 A and B), not to mention several secondary centres in Saurashtra also, as at Junagarh, Dholka, Dhanduka, Gondal, etc., a great variety of monuments was reared, keeping also certain norms, as between a private mosque and Jami masjid (the former often bereft of the *minar* with its inner stair-well as *azan* call is not relevant there), and residential patterns and defensive patterns. The mixing of semi-military ornamentation of turrets, *kanguras* and buttresses is generally not preferred in Gujarat style and a disciplined integration of structural stability, functional clarity of parts, and direct link with utilization patterns of the space as well as utilitarian devices were the prevailing modes. Special creations include the so-called shaking *minars*, of which at least three different examples exist in Ahmedabad, and are seemingly created by the use of "flexible sandstone" in the foundational cushioning of the *minar*, although other theories are also fancied. The use of brick structures seemingly went side by side with stone, for small as well as big structures, as in Azam and Moazzam Khorasani archer's tomb and in Darya Khan's tomb. But, on the whole, stone was consistently in use and structural principles in stone were most perfectly

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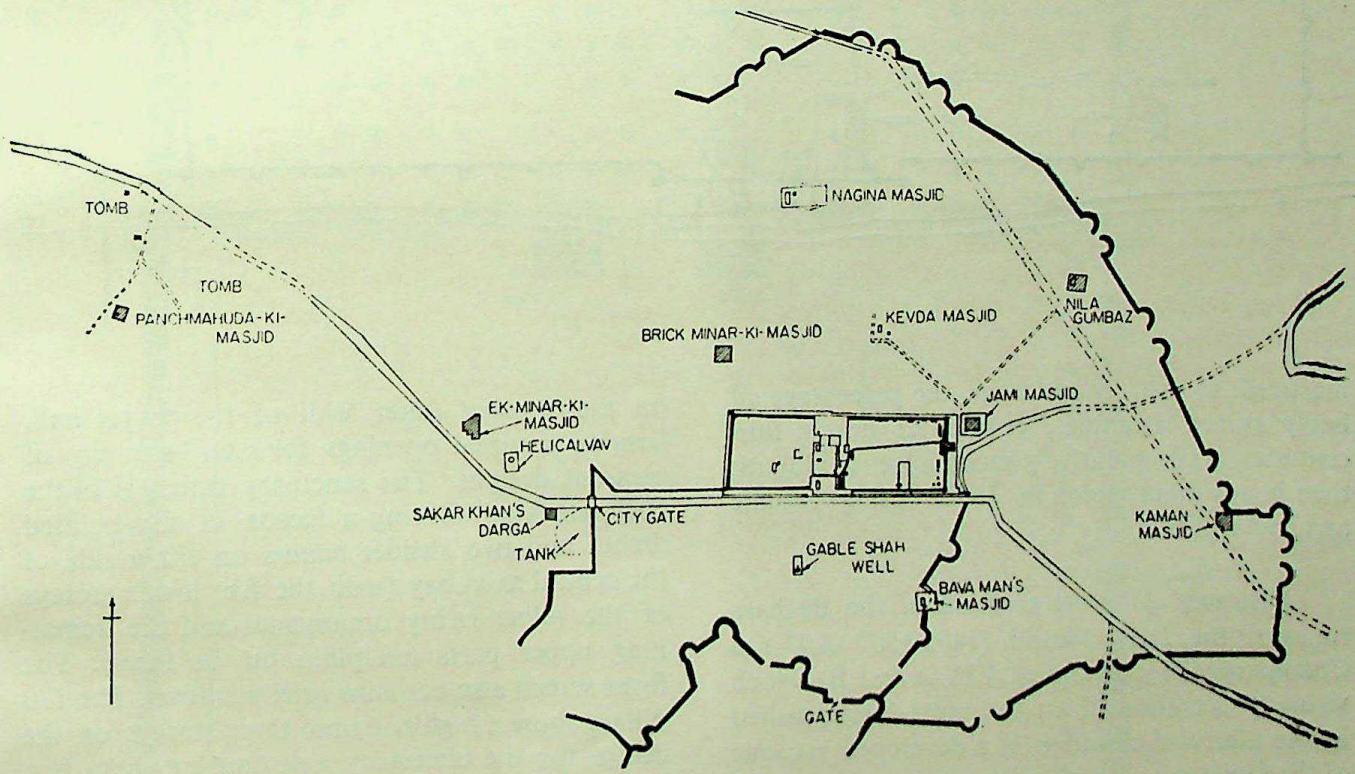
68a. *Champaner—System of lower fortification and the inner city.*



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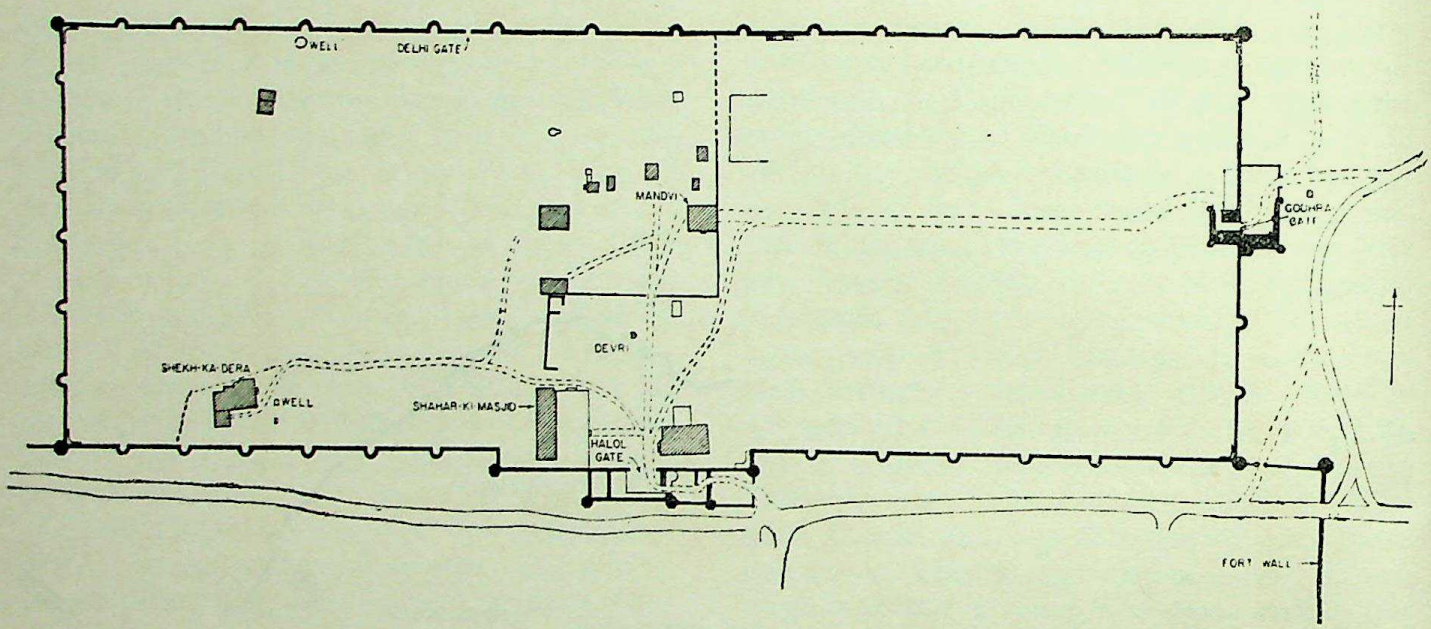
68b. *Champaner—Plan of inner city.*



mastered. so that, by and large, the percentage of badly ruined examples, even after nearly four centuries, is comparatively much lower in Gujarat than in any other region in India, using Islamic architecture.

The most elaborate creation of the Beghara times is the Jami Masjid (1485-1507 A.D.) at Champaner (Fig. 69 and pl. CIV A and B) which virtually sets the seal on the most distinguished layout plan and elevation of a developed mosque of the Gujarat Sultanate. Set within an oblong of 270 feet by 180 feet, with more than half of this occupied by galleries on the sides and front, and a gate and the rest of the space for the sanctuary, it shows exterior craftsmanship not often seen in this region, in the form of gracious entrance pavilions to the main eastern side and additionally to the north and south, and moulded buttresses on the western outer wall of the prayer hall, besides traceried openings for light and air, of pleasant designs. The sanctuary which is of the enclosed kind, having a facade of five-pointed arches and two slender *minars* on either side of the central axial bay (with the five lower storeys of the *minar* richly ornamental and the remaining upper parts left plain on its faces). The front screen also contains *oriel* windows. The 170 pillars show a high rise upto three storeys on the centre for the clerestory and cresting them is a high ribbed and fretted dome. It is also provided with a customary mezzanine gallery for the *Zenana* on the northern end. The pillars of Champaner are surely much more ornate in their work than any of the corresponding ones at Ahmedabad, in both surface workmanship and designing. The total rise of sixty-four feet height presents also on the ground of the sanctuary a

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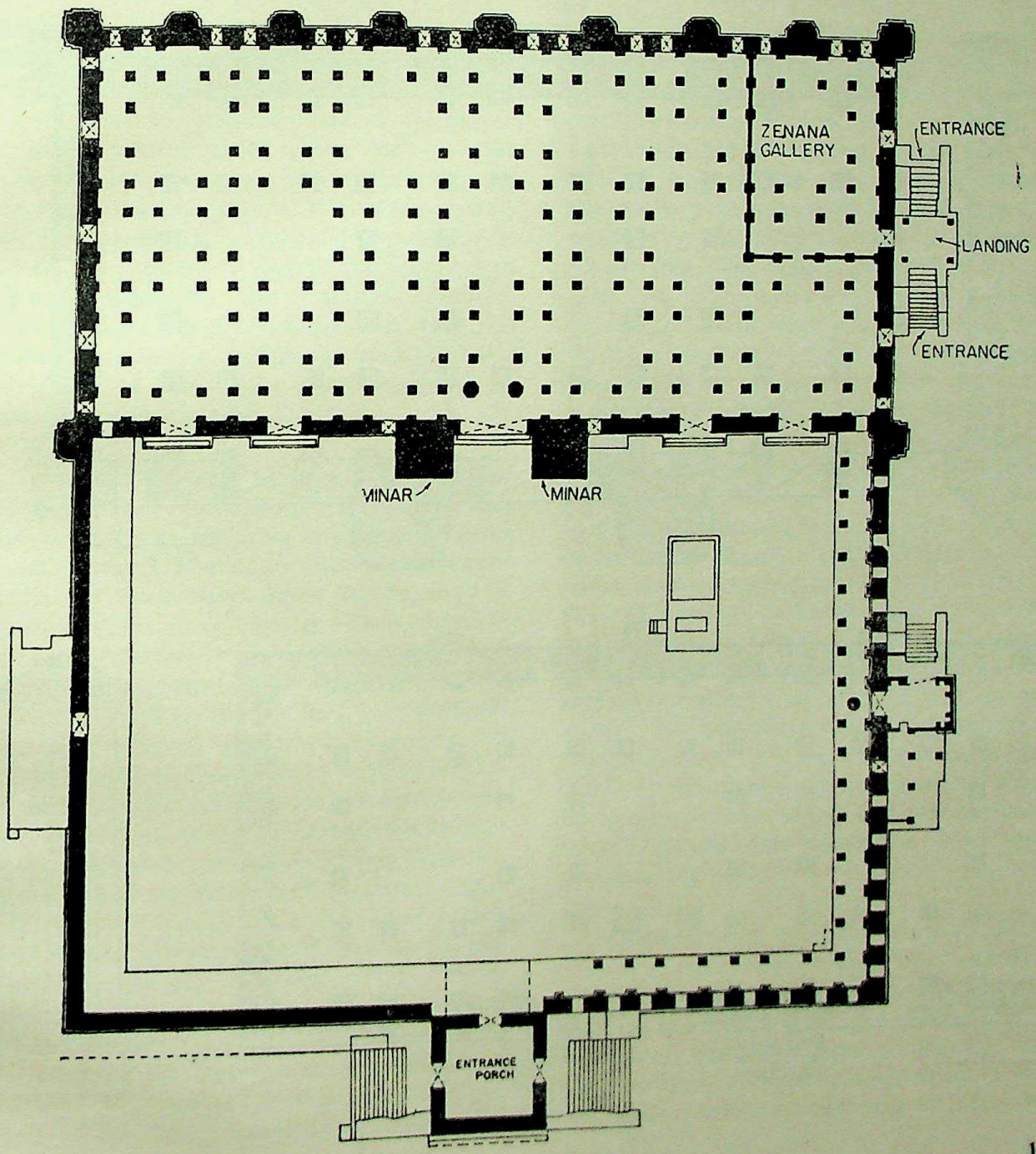
69. *Jami Masjid, Champner.*



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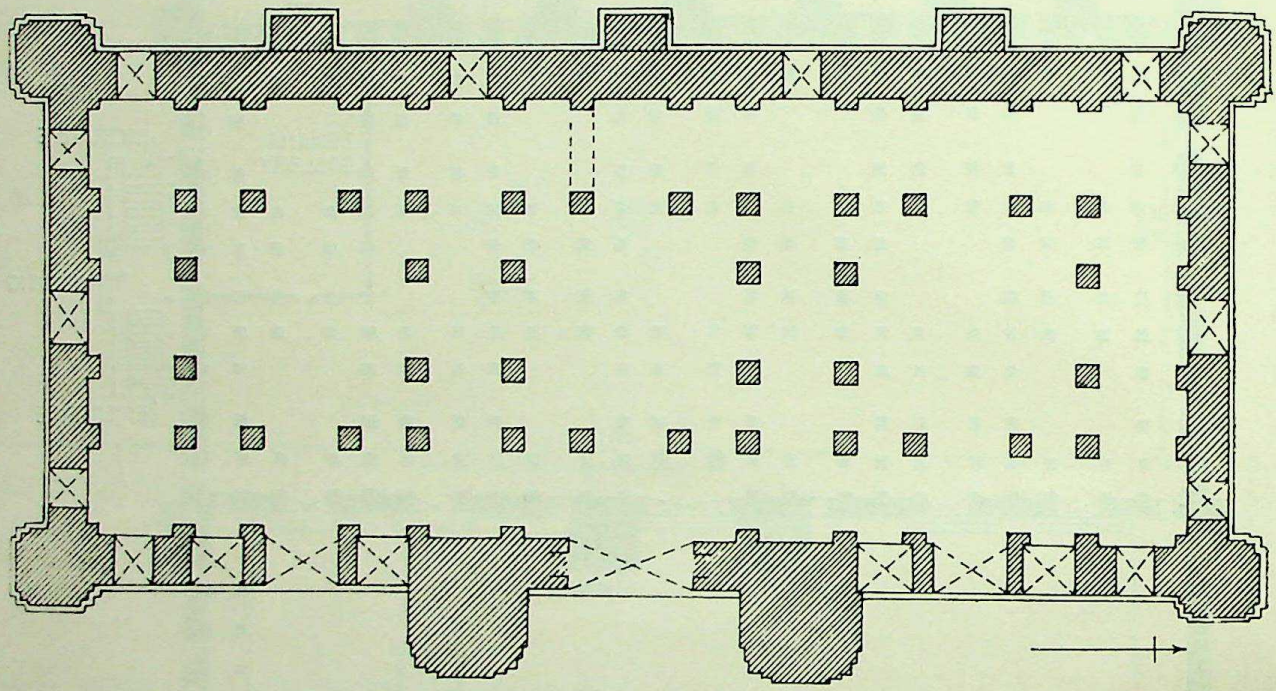
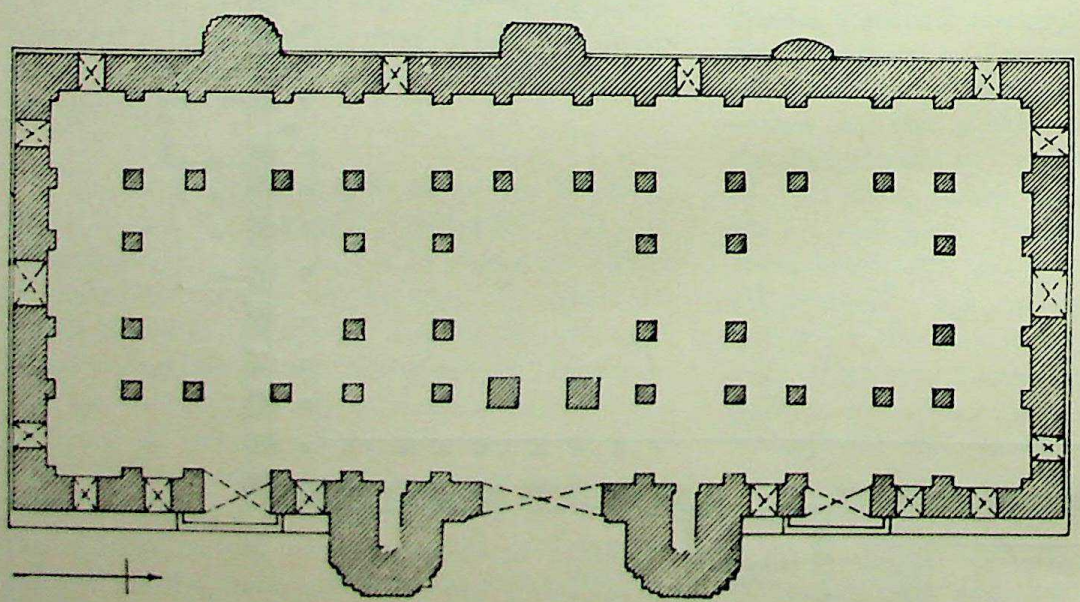
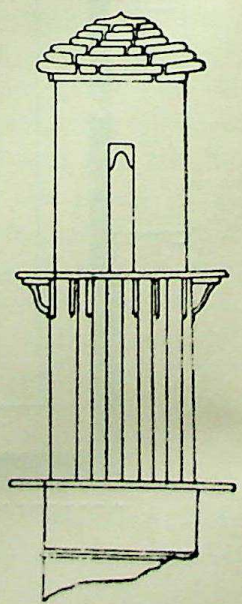
70. *Champaner, Nagina Masjid.*
71. *Champaner, Kevda Masjid.*







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central *rotunda*. The access to the floors are through the staircases in the *minars* and each of these have balconyed projection opening out and are well separated from the pillars of the prayer hall below, thereby giving scope for secluded meditation and contemplation, undisturbed by the prayer hall activity below. The entrance porch of the Jami Masjid is an aesthelic creation in itself and has been more elaborately repeated in the Nagina Masjid (Fig. 70) here of the same period. Kevda Maslid (Fig. 71), Lila Gumbad (Fig. 72) are other variations at this place, while Sikandar Shah *Rauza* at Halol (Fig. 73) nearby is an original layout for a tomb.

Further, it is only in Gujarat that we find an aesthetic balance in the mosque and tomb structures, in a complex, the latter invariably properly aligned to the orientation as well as general proportions to the former. There is, however, a distinctive difference shown between the mosque and tombs (*Rauzas*) in architectural patterning. Surface ornamentation is superb and often becomes over rich, though not overburdened. There are, however, also instances where the Gujarat craftsman could rise to inspired heights of elegance, as in the Sidi Sayyid mosque screen where, displaying neither artificiality nor exaggegration in their ten semi-circular tracery windows, they produced a unique class of exquisitely naturalistic patterns, which are comprehensive and almost ethereal, giving an overall lightness to this otherwise ponderous structure. This, in its individual lapidarist craft and in collective and inter-related structural symphony, as in the Rani Sipri mosque, will stand out as an unparalleled bequeathal of Gujarat to the decorative art pool of India. Again, balancing of plain walls, screens and architectural back supports, were clearly other attempts to underplay their own avowed *penchant* for rich surface decoration, and give the requisite relief to the architectural mode. Shahpur Khazi's mosque is a relevant case in this regard. All the same, in the later stages of Mahmud Beghara's time, especially at Champaner, the tendency to concentrate on the tall and tapering *minars* with their conical top roofs becomes an obsession, and sometimes presents a lack of balance, especially when it is added to an already existing mosque type of different facade elevation than the characteristic arched central part. This is eloquently brought out by the example in Shah Alam's mosque where the *minars* were late Mughal additions. Despite their conventional associations with mosque in Gujarat, one is able to see the difference, since it is against the grain of the craft acumen evinced in Gujarat mosques. In the ultimate analysis, the Gujarat architectural style, well moored in indigenous forms, devices, and inured to nearly a millennium of *quondam* Hindu temple usage, was yet able to produce a very cogent and varied series of Islamic monuments when the need arose, without any new training or understanding, and thus introduced a continuing harmony in the environmental scheme, fitting also into the mixed religious persuasions of the Hindu and Jain population already predominent in the region.

Gardens were never, however, deliberately cultivated—seemingly because water was, by and large, scarce. But, in much the same way as the Mughals had a sense of space and setting for the monuments and no economization in this regard was practised, so also in Gujarat monuments, one finds a certain spaciousness of total layouts

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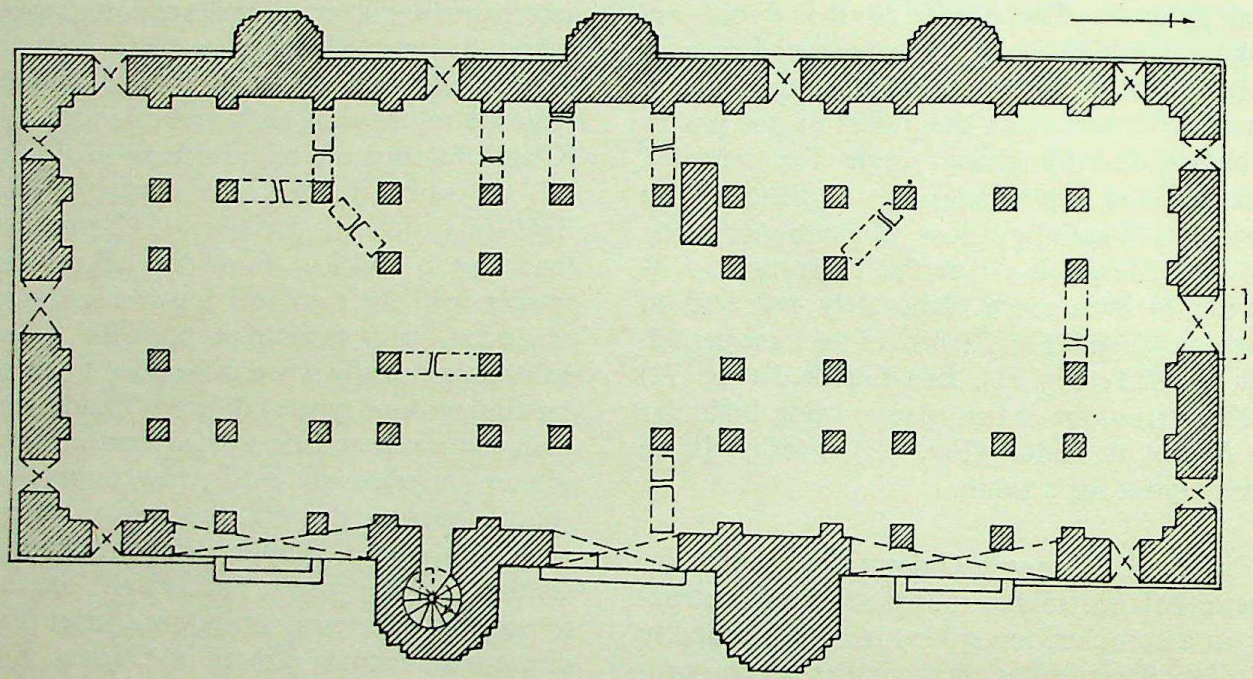
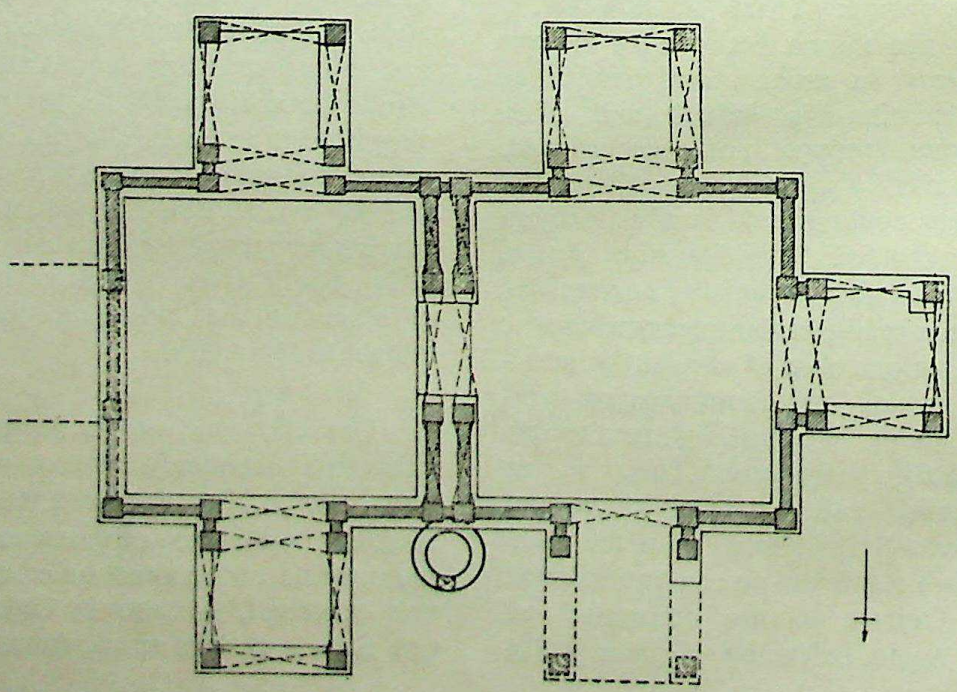
72. *Champaner, Lila Gumbad*
73. *Rauza of Sikandar Shah, Halol.*





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despite the absence of a garden, in their ground level and upper storey delineation and the preference of a large court in front of their monuments. Like Bengal, in a different way, Gujarat also trailed its own indigenous path in architecture, using native genius, expertise and long experience in stonecraft and building concepts, but, was even one better in its overall planning, than Bengal where at least in the later Mughal stages, a transformation suited to the Imperial masters had been seen.

Gujarat Islamic architecture, in sum, tended to keep up its indigenous flair and scheme up to the late stages and merged into the general panorama of the regional religious art and earns our gratitude. It also vindicates, ever so evocatively and forcefully that Islamic architecture in India is not a transplantation of unrelated structural categories of religious art, but one that, equally with the Hindu modes, grew from the soil and harmonised with the regional *ethos* fully, but in variant perspectives.

Important Gujarat mosques and tombs

Pre-Sultanate (under Imperial Khilji and Tughlaq Governors of Delhi)	Mausoleum of Sheikh Farid and Jami Masjid, Patan;	(1300-1411)
	Jami Masjid, Broach;	*c.*1300
	Jami Masjid, Cambay;	*c.*1325
	Mandal Jami Masjid and Kazi Masjid, Hilal Khan Mosque, Dholka.	*c.*1300-1325 1333
Ahmad Shah (1411-42 and his successors, Muhammed II, Qutbuddin Ahmad II, Daud)	Ahmad Shah's mosque, Ahmabadad;	1414
	Haibat Khan's Mosque, Ahmedabad;	1424
	Jami Masjid, Ahmadabad;	1424
	Sarkhej group of monuments (Rauza of Ganj Baksh, Jami Masjid, Mausoleum of Mahmud Beghara and his queens);	1442-58
	Kankaria inlet-sluice;	1451
	Bibika Masjid, Rajpur, Ahmedabad.	1454
Mahmud Beghara (1459-1511) successors (Muzaffar II, Sikandar, Mahmud II, Bahadur, Mahmud III, Muzaffar III-Surrendered to	Shah Alam's Rauza at Rasulabad;	1483
	Isanpur Mosque, Ahmedabad;	
	Muhafiz Khan's mosque, Ahmadabad;	1469
	Rani Rupavati mosque;	*c.*1485-1500
	Rani Sipri's	

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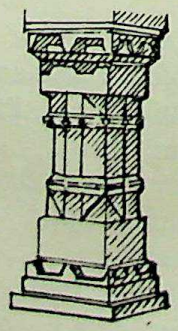
74. *Mosque at Tribeni, Stone pillar of Hindu style in the interior.*

Akbar in 1578)	mosque;	1514
	Baba Lului's mosque; at Ahmedabad;	1525
	Shahpur Kazi's mosque;	1565
	Sidi-Sayyid mosque, Ahmedabad;	1572-75
	Tomb of Abu Turab.	1547
	All the mosques and tombs at Champaner including Jami Masjid, Nagina Masjid, Kevda Masjid, etc., mostly of the time of Mahmud Beghara.	1485-1525
Mughal (Shahjehan, Aurangazeb)	Shahi Bagh Palace,	1616-1622
	Sardar Khan's mosque and tomb;	1685
	Azam Khan's Palace	1637

(iii) *Bengal*

The indigenous genius of this style draws from the rural bamboo and thatch-based (or alternately timber and brick based) *chauchala* (square) and *dochala* (rectangular) forms of wall-posts with sagging and drooping curve-edged roof of two distinctive outlines, and conduces to distinguish two clear stages—the pre-Mughal and the Mughal for the region. We may separate the former into several sub-stages of temporal rule, keeping in mind the variety of form or structures that were created, stage after stage, within the simplified format and highly ornate interior *qibla* wall decorations of brick and terracotta repertory, part pre-Islamic and part innovatory, non-representational and floral of the Islamic stages. There have been several meaningful art historical studies of the forms and the sources of adaptation in the various stages. On the one hand, it is seen that the style is indisputably moored to the geographical, climatic and craft specialisation factors of this deltaic region (together with its uplands, no less watered by rivers and streams) and one can persuasively separate the profound character of the pre-Mughal stages and the clearly identifiable break, with the advent of the Mughals and induction of a new pattern, model and device in that stage. We may also separate certain provincial and local development, stagnation and variations. The main phase, on all accounts, after the initial Mamluk style (A.D. 1204-1338) when ornate Hindu pillars were fully used in mosque interior (Fig. 74) is the Ilyas



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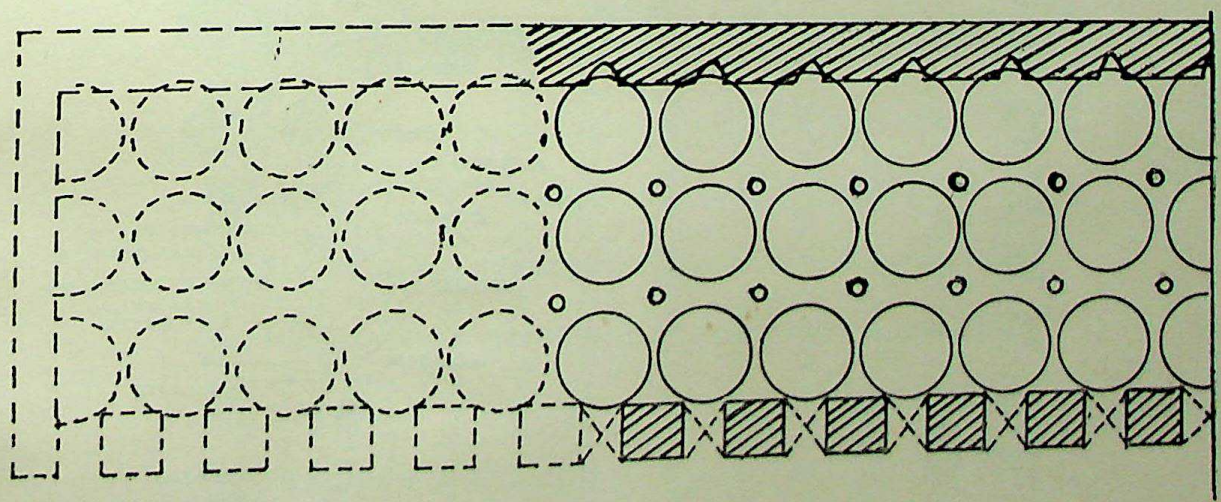
75. *Bari Masjid, Chota Pandua (half plan)*

Shahi style, moored at Gaur (the new name of Lakhnauti) whose two major phases are the early (between 1351-1388) and later (between 1435-1493 Fig. 75), in between which can be placed the Eklakhi stage, of the Hindu Raja Ganesa and his convert son Jalaluddin (1415-1435), represented in so far as Islamic art is concerned by the Eklakhi mausoleum at Pandua (Fig. 76). The architectural richness of Gaur (Fig. 77) is fully borne out which, besides the two Ilyas Shahi stages (including the Abyssinian interregnum between 1487-93) covers also what is called as the Hussain Shahi phase (1493-1593—Fig. 78), followed by the Khan Jehan phase, moored at Bagerhat (Fig. 79) from the mid-15th century A.D. and contemporary with the Nasiruddin Mohammad I of the second Ilyas Shahi rule at Gaur and existing upto early 16th century A.D. as in the Qasba and Masjid Bari (Fig. 80) mosques in Bakerganj Dist. We are thus left to differentiate between *two* aspects of the style, even within the region, into the *Shahi* rule from Gaur and their provinical and *regional* rule from other centres including the interregnum at Gaur, before



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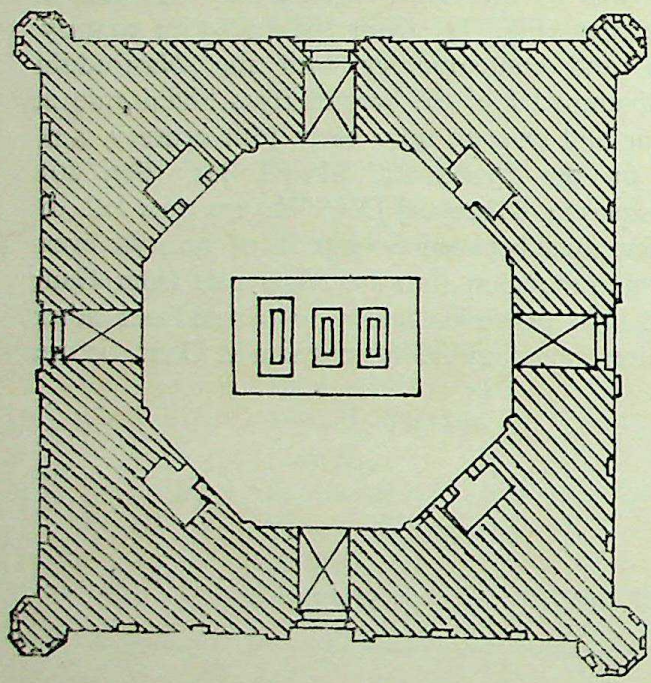
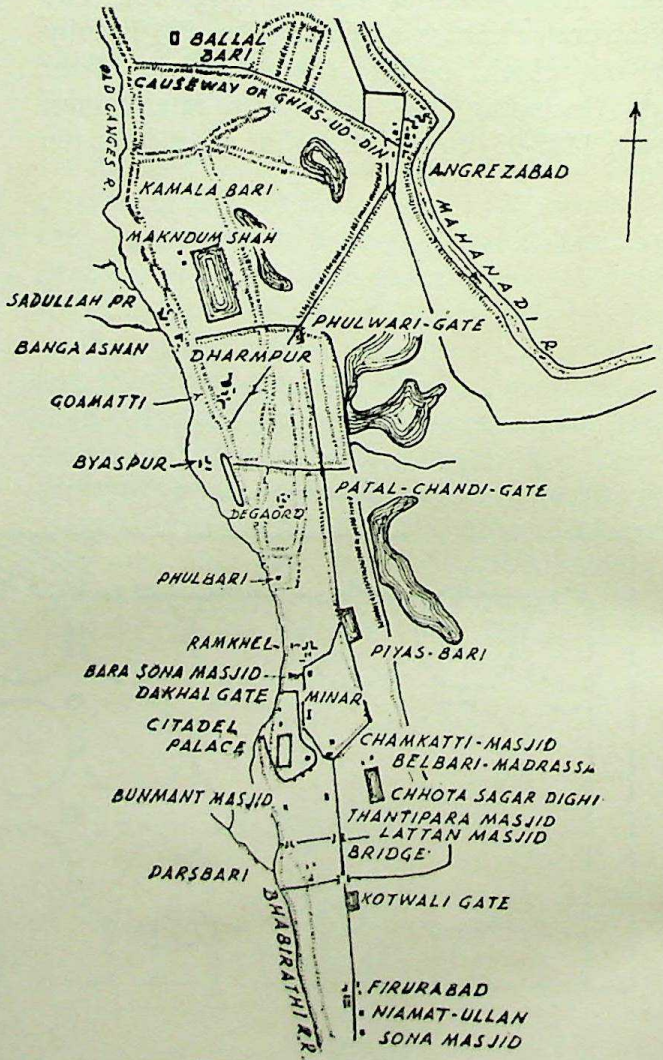
76. *Eklakhi mausoleum.*



77. *Ancient remains at Gaur (Lakhnauti)*



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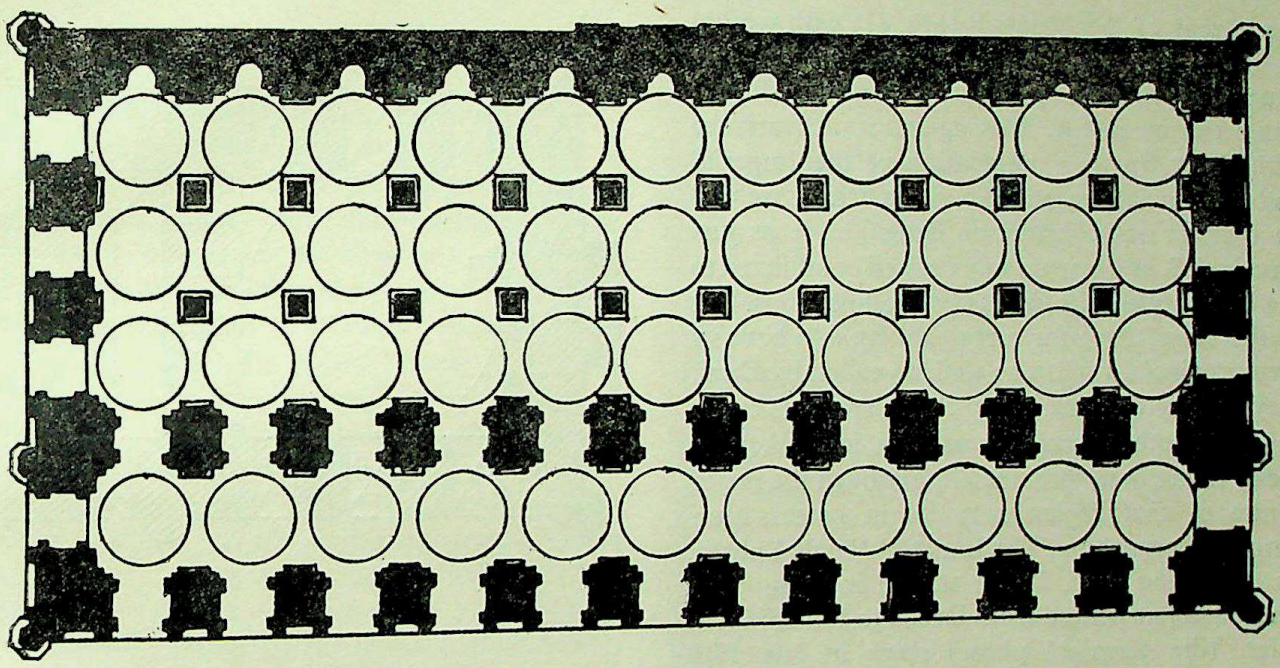
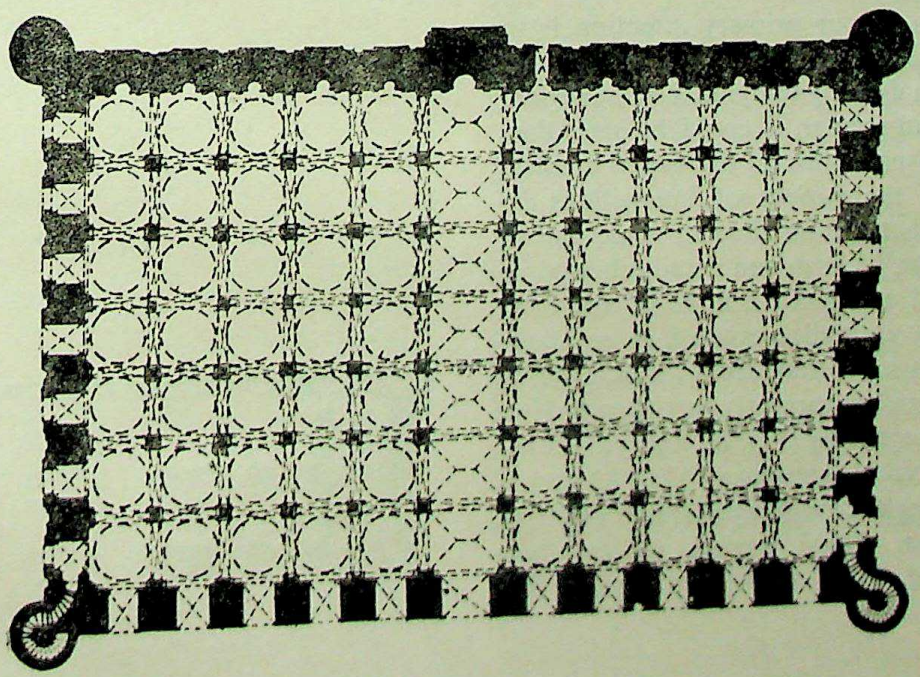
78. *Bara Sona Masjid, Gaur.*
79. *Sat Gumbad, Bagerhat.*





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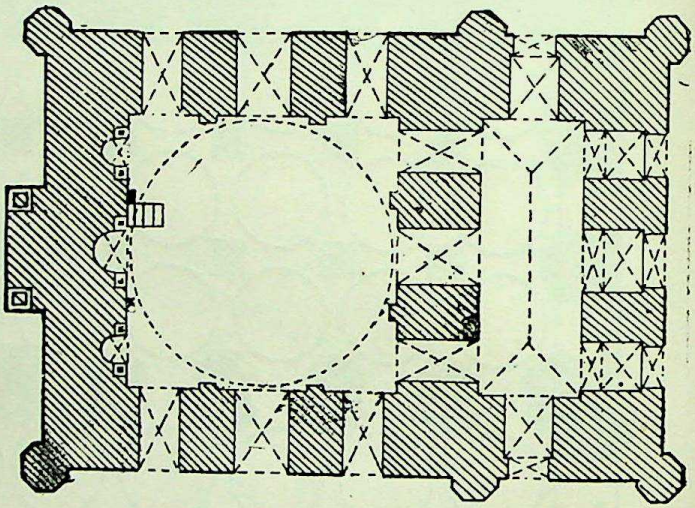
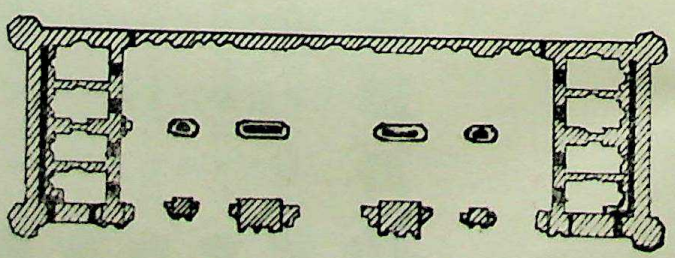
80. *Masjid Bari mosque*
81. *Jami Majsid, Rajmahal*

the advent of the Mughals (Fig. 81) with capital at Rajmahal in 1595 A.D. Even within the Mughal style, an early and an Imperial Mughal phase can be traced. This again, is at variance with Percy Brown's designation of the Imperial and 'provincial' usages. To some extent, we will be right in not considering Bengal style as just 'provincial', as it is in no way obliged or affiliated to the Delhi style in its origins or modifications. But at the same time, for a regional style to have its own provincial variant as well, as called by Dani, may be overdrawing the picture, and it is better to call the other variations as of a lower key or local, rather than 'provincial', although the major centre of that region may be in great status, temporally speaking. The Imperial Mughal phase, as emanating from Dacca started in A.D. 1608 and was again shifted from Dacca to Murshidabad later (the terminal phase) stage in late 17th century A.D.



In as much as our primary intention is to identify the basic potentialities of the style and trace them, from dynasty to dynasty in the region, both religious and secular, it could be seen that, in the overall visualization of the *models* created, notwithstanding the variety of innovations integrated with them, from time to time, and of varying perfection of form and detail achieved in the greater and and lesser centres of art, there are essentially seven models created, in an evolutionary or digressional trend from the basic norm. They are represented variously by the early Ilyas type at the *Adina Masjid* (Fig. 82 and pl. CV) at Pandua; the *Eklakhi* mausoleum (Fig 83 and pl CVI) at Gaur, the *Lattan Mosque* (pl. CVII) type of the Hussain Shahi period, *Qadam Rasul* (Fig. 84 and pl. CVIII) of the same period, *Sath*



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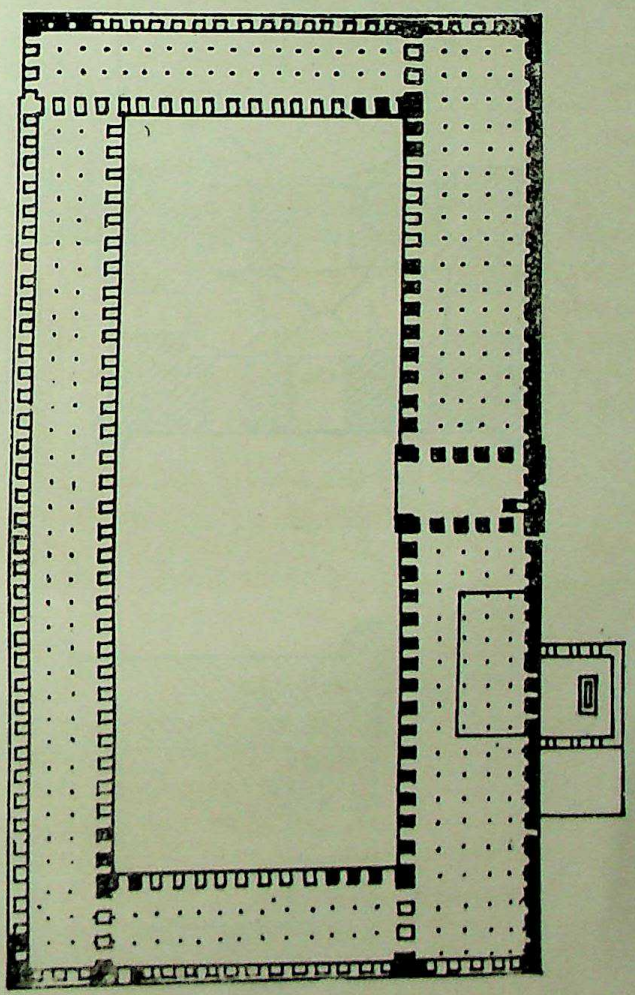
82. *Hazrat Pandua, Adina mosque.*



Gumbad of the Khan Jehan period, the Mughal style as in the *Khara mosque* at Sirpur (Fig. 85) and *Lalbagh mosque* at Dacca (Fig. 86). This is primarily seen in so far as layout of the *plan* is concerned which is one of the key factors in the understanding of an architectural model. On the other hand, in so far as the *elevation* is concerned, certainly the Mamluk period *mosque of Zafar Khan Ghazi* (1298), one of the earliest Islamic constructions in Bengal, the *Adina Masjid* of Pandua, (1275), the *Tantipara Masjid* at Gaur (1480) the Darashbari mosque—which was indeed a *madrasa*—(1479) at Gaur, the *Chota Sona* masjid at Gaur (1493-1519—Fig. 87), the tomb of Bahram Shah at Burdwan (1562), the *Bara Katra mosque* at Dacca (Fig. 88), the *Tomb of Fath khant* (pl. CIX) at Gaur (1660), the Shah Muhammad mosque at Egarisindur (1680), and the *Katra mosque* at Murshidabad (1723—pl. CX) stand out significantly as important stages in the designing of the elevational volume and features.

We may, however, do well to identify, first, the basic character of the Muslim architecture of Bengal. On the one hand, it revelled in translations of the brick style into the brick and stone constructional vogue, its fluted faceted or octagonal and twelve sided-towers and *minars* (pls. CXI A and B), the fantastic richness of detail of *mihrabs* and its tympanum in terracotta and tilework. Fundamentally, the pre-Mughal is clearly separated visually from the Mughal, by the plastered walls, shouldered domes, four-centred pointed arches, horizontal parapets faced with blind merlons of the latter, whereas the pre-Mughal was having its arches of two-centred type, though pointed, springing from four heavy stone piers and in the interior, from similar

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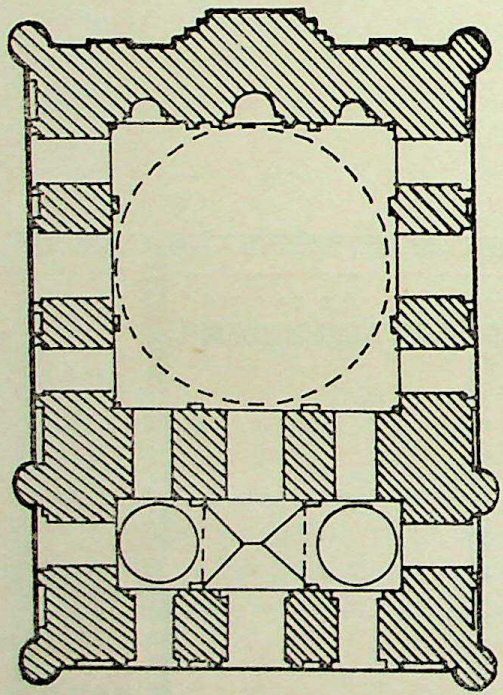
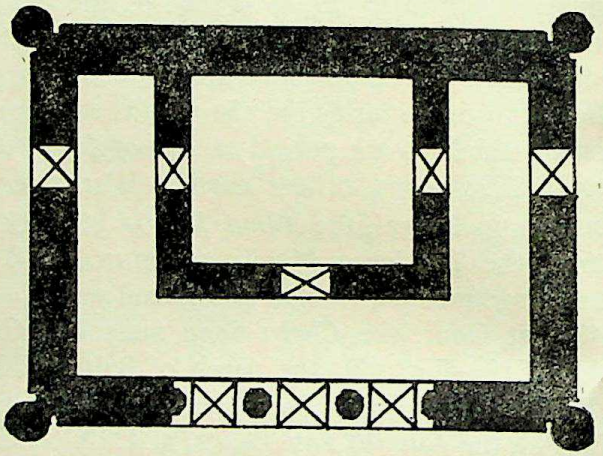
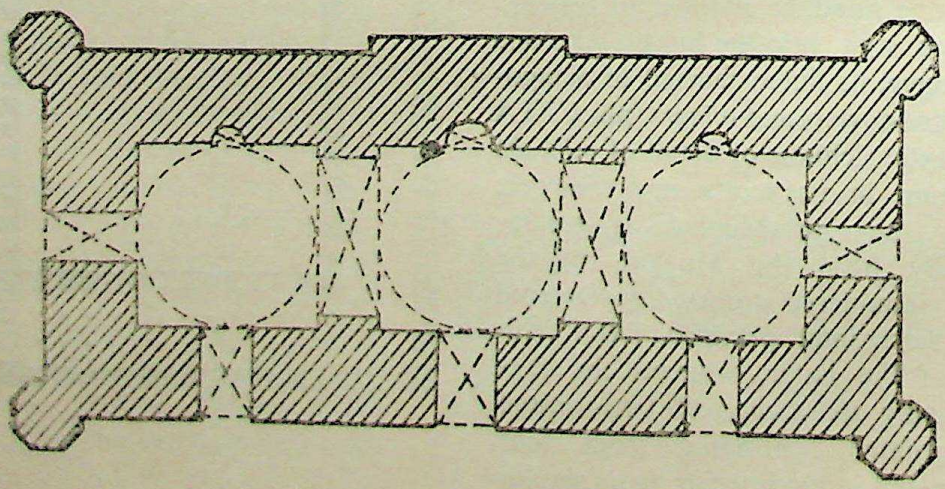
83. *Lattan Mosque, Gaur.*
84. *Qadam Rasul, Gaur.*
85. *Kherwa mosque, Sherpur.*







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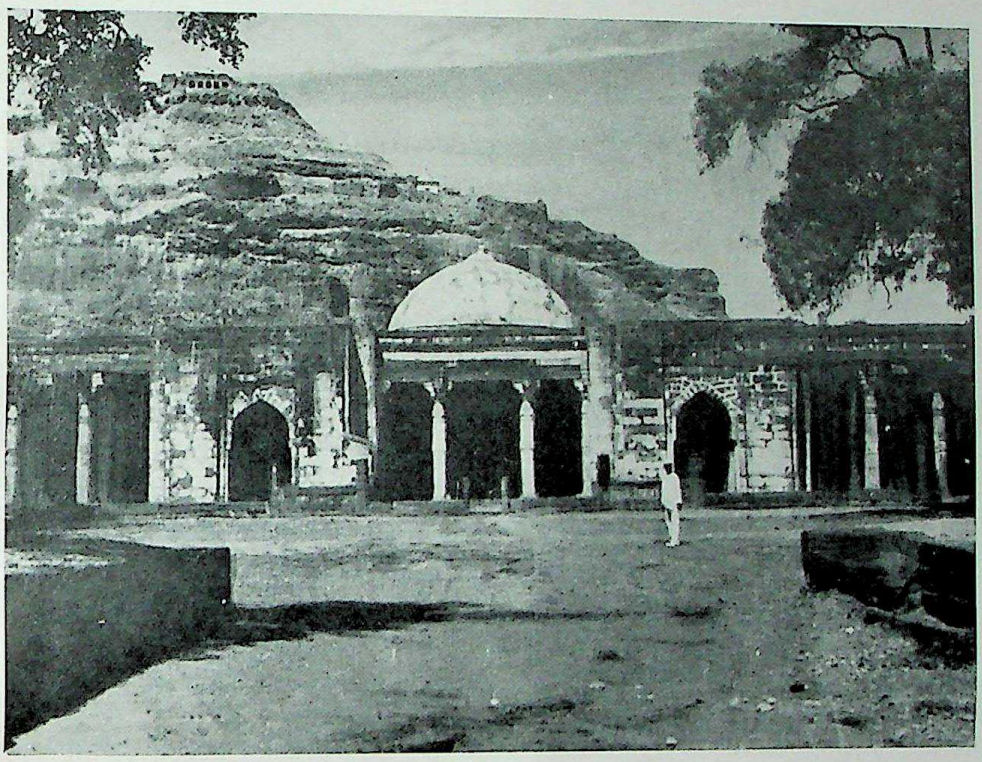

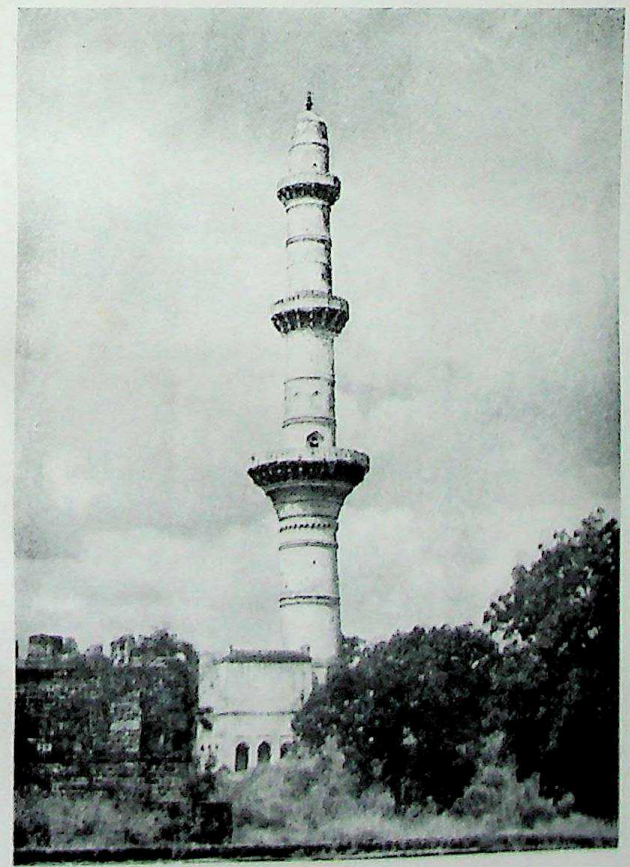

100. Jami Masjid, Daulabad.

101. Chand Minar, Daulabad.

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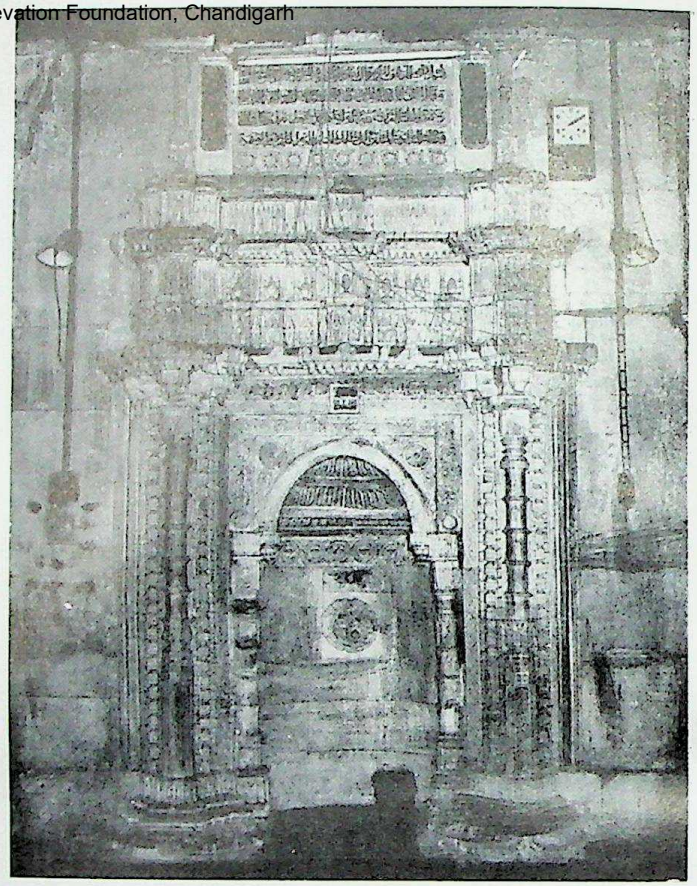
102. Sanctuary details of Jami Masjid, Broach.

103. Exterior view of Jami Masjid, Broach.



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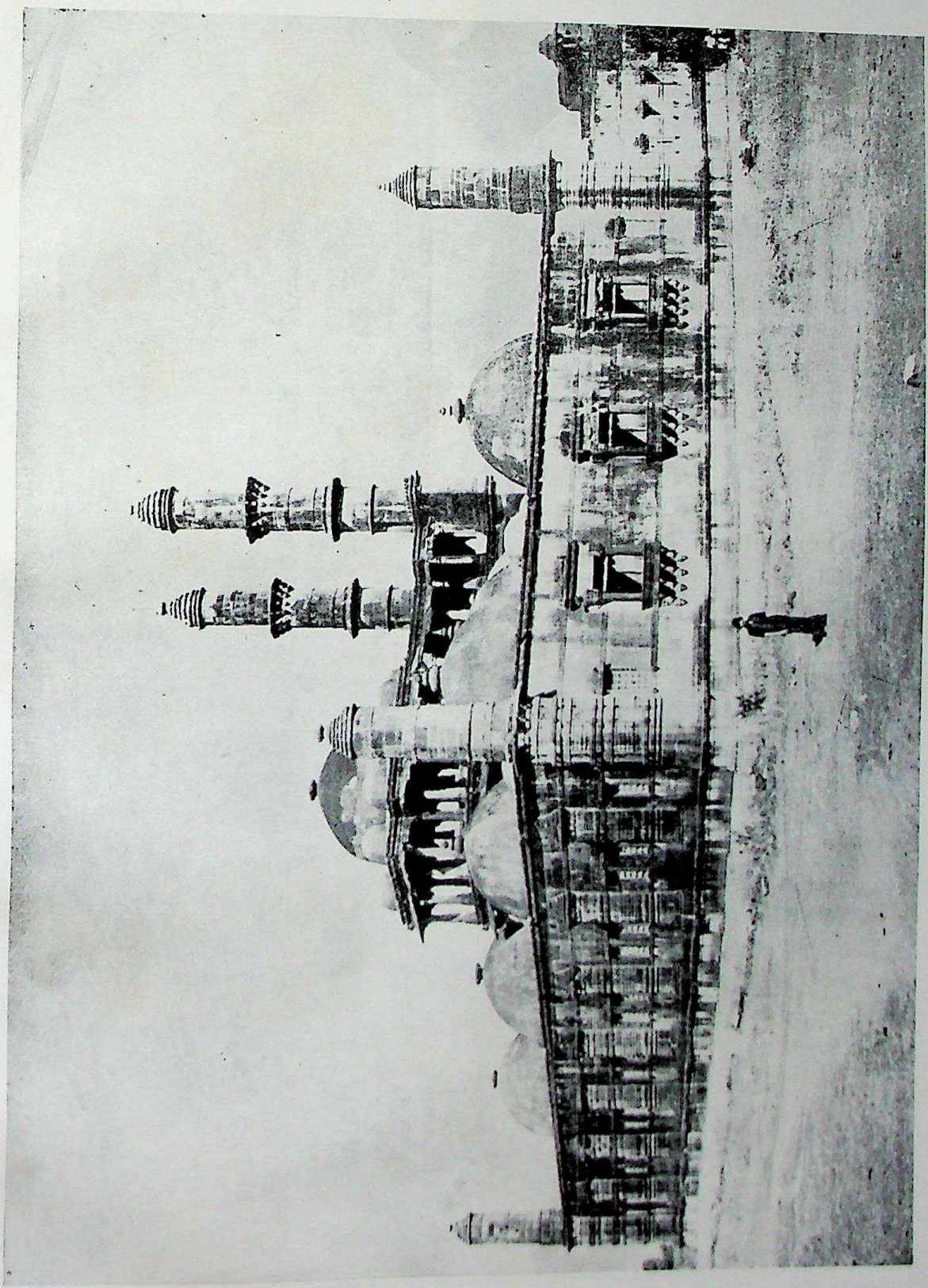

104a. Jami Masjid, Champaner.

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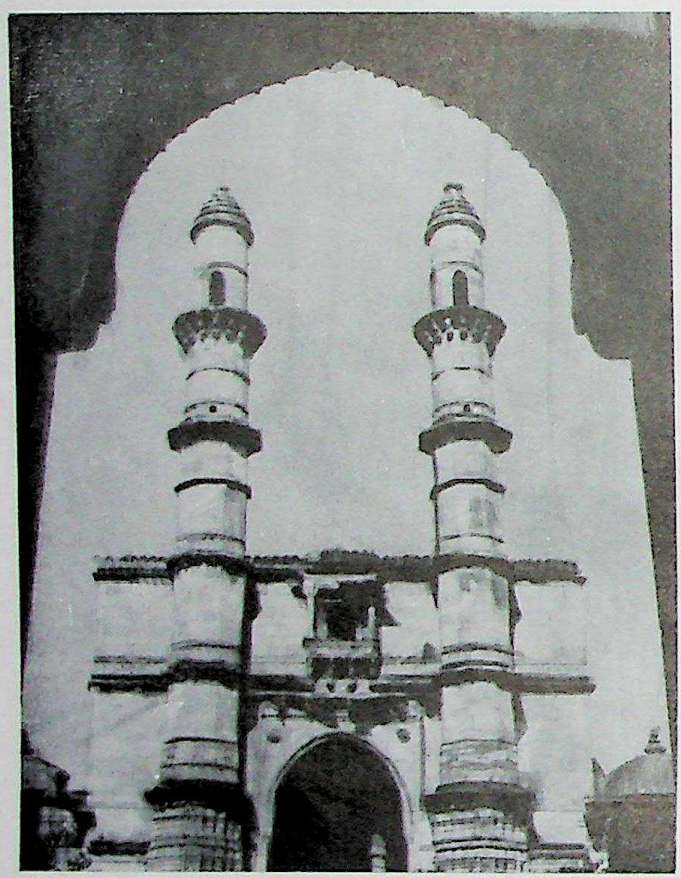
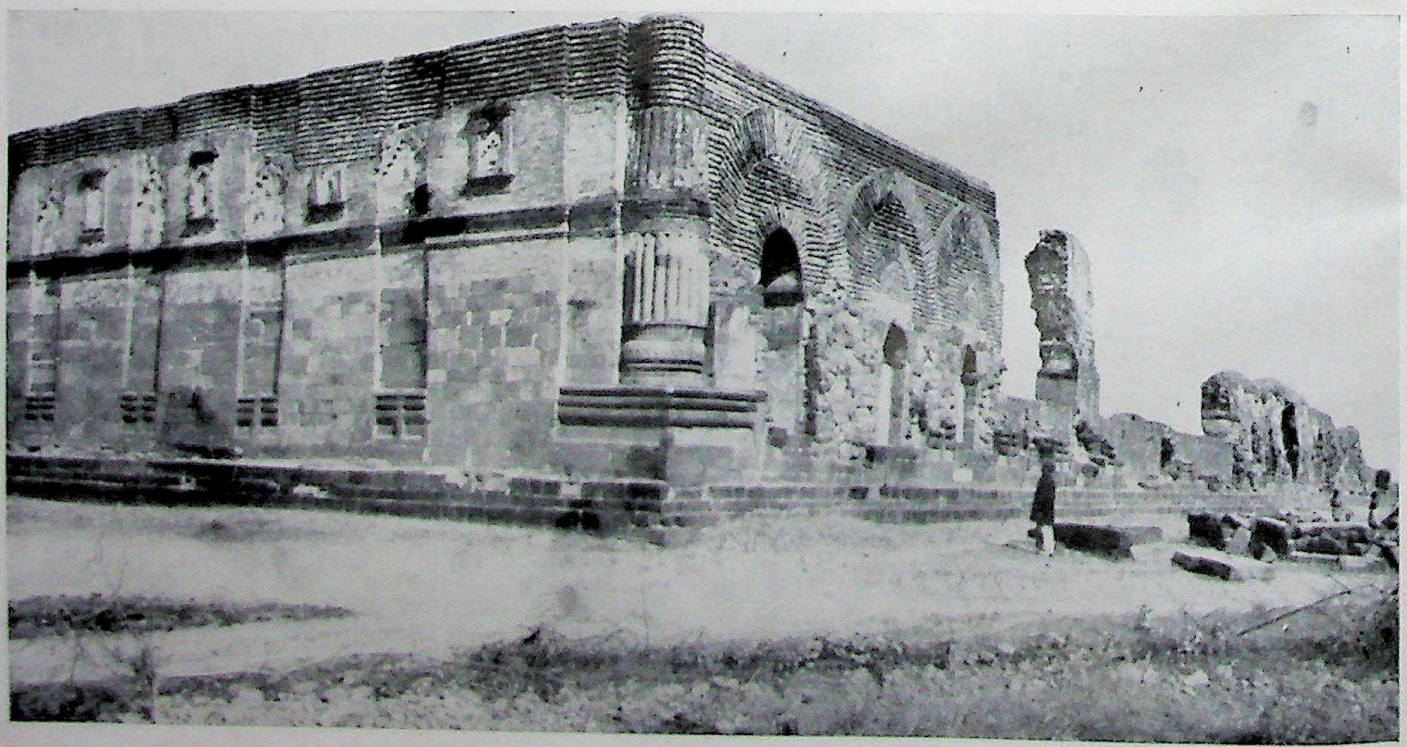


104b. *Minar* details of Jami Masjid, Champaner.

105. Adina Masjid, Pandua, West Bengal.



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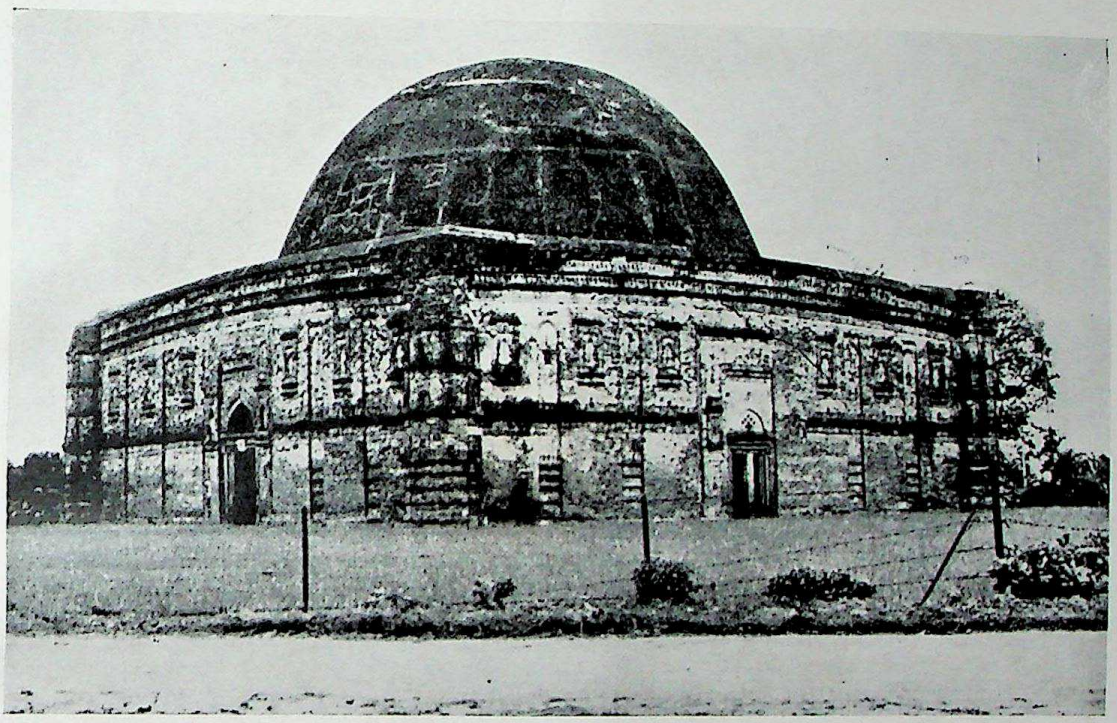
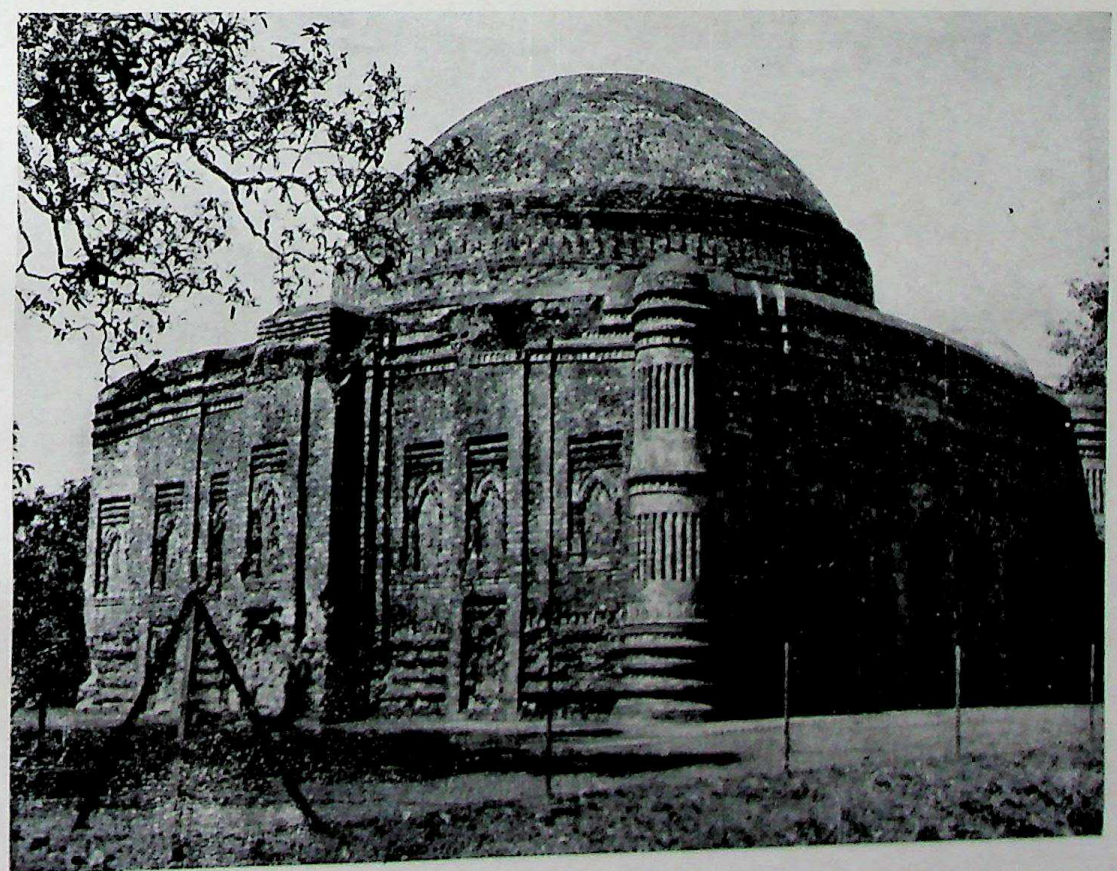
106. Eklakhi Mausoleum, Gaur, West Bengal.

107. Lattan Mosque, Gaur, West Bengal.





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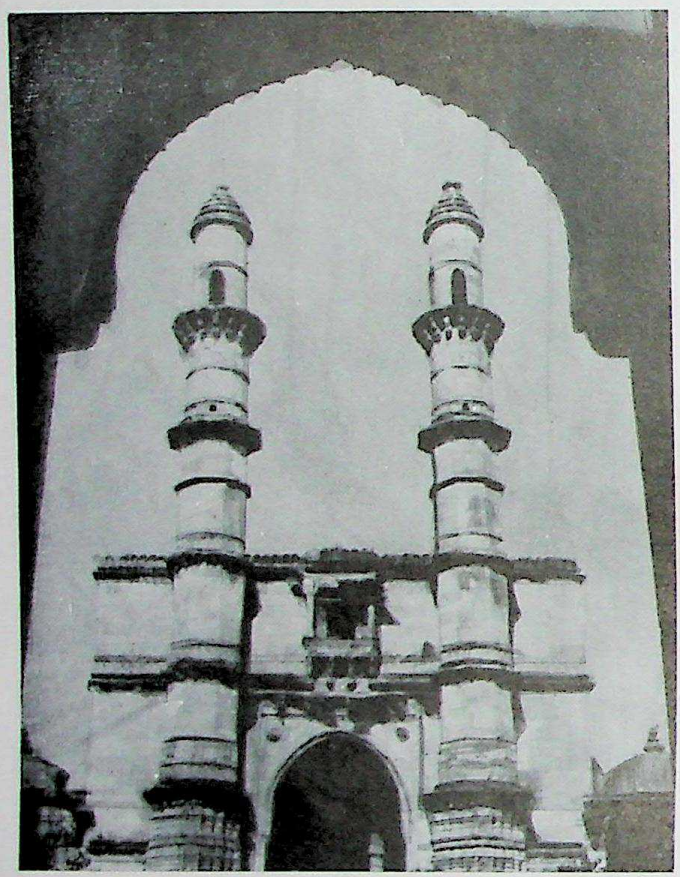
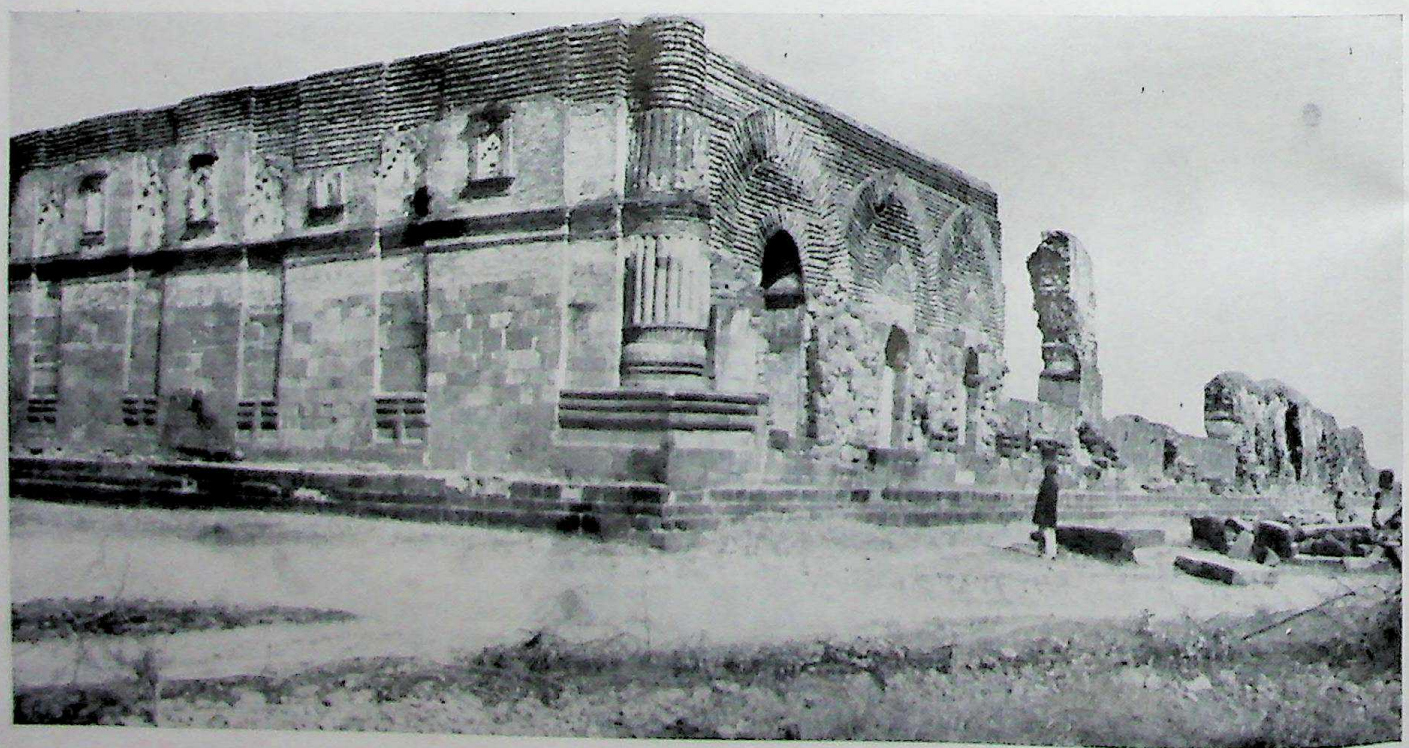


104b. *Minar* details of Jami Masjid, Champaner.

105. Adina Masjid, Pandua, West Bengal.



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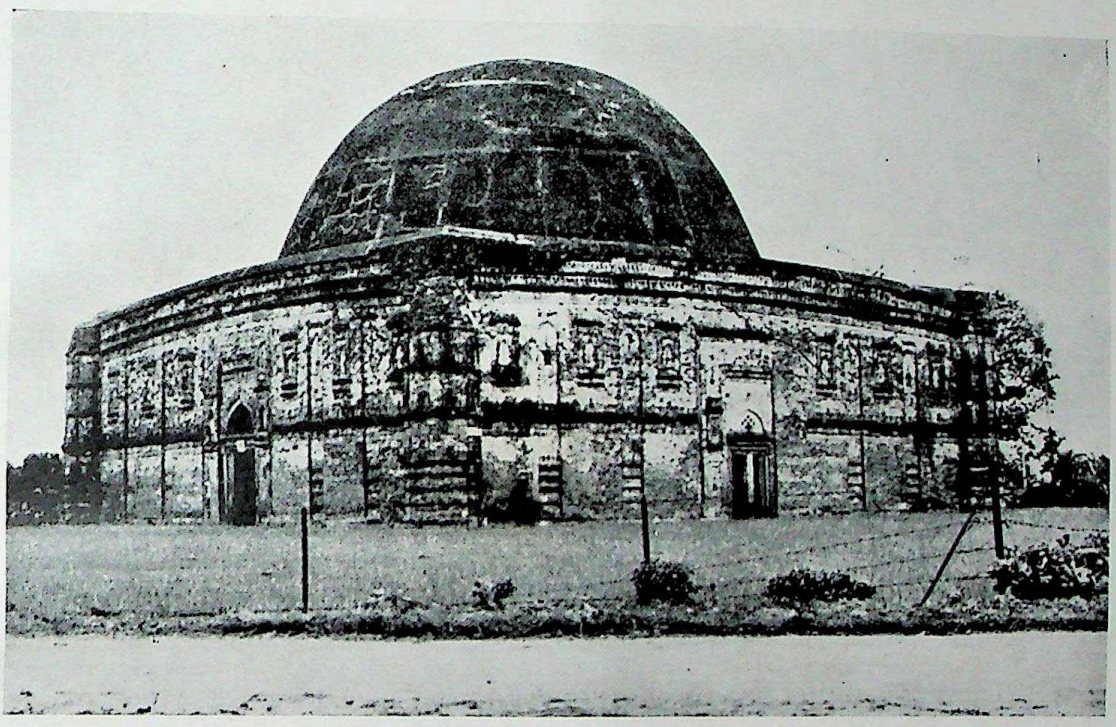
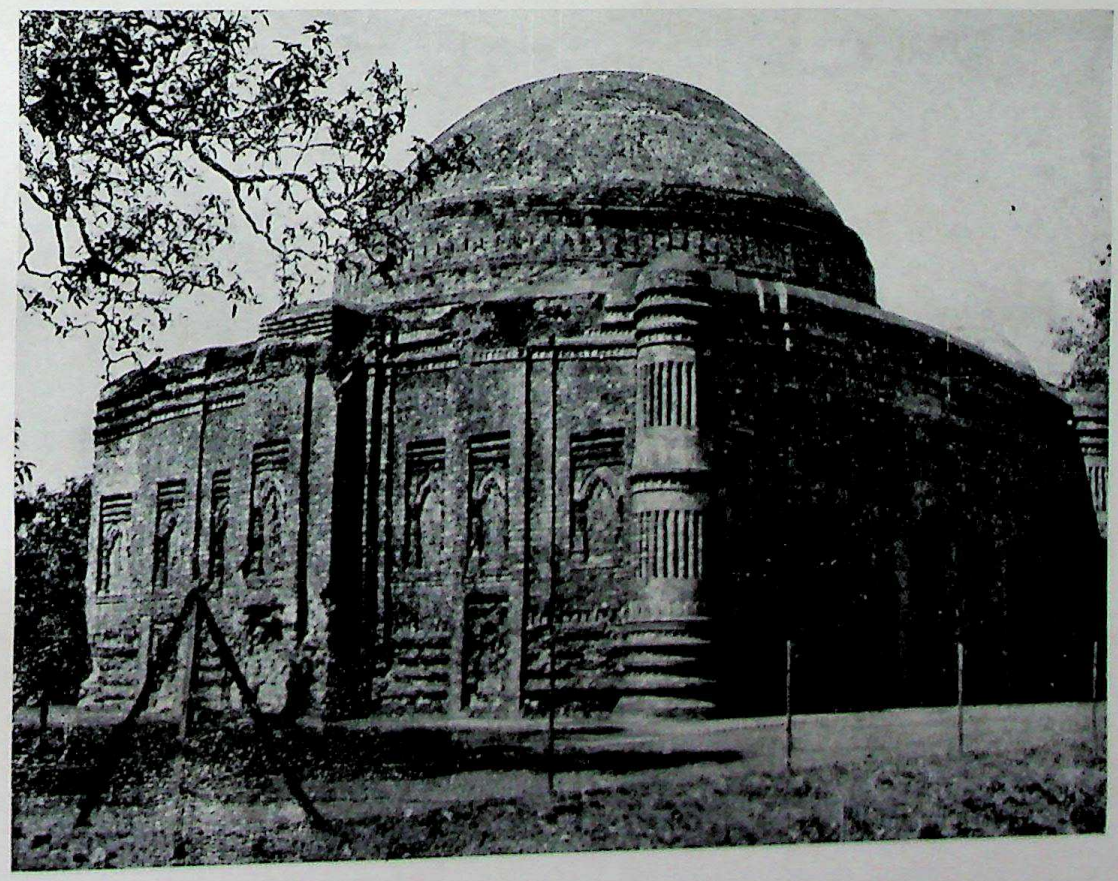
106. Eklakhi Mausoleum, Gaur, West Bengal.

107. Lattan Mosque, Gaur, West Bengal.





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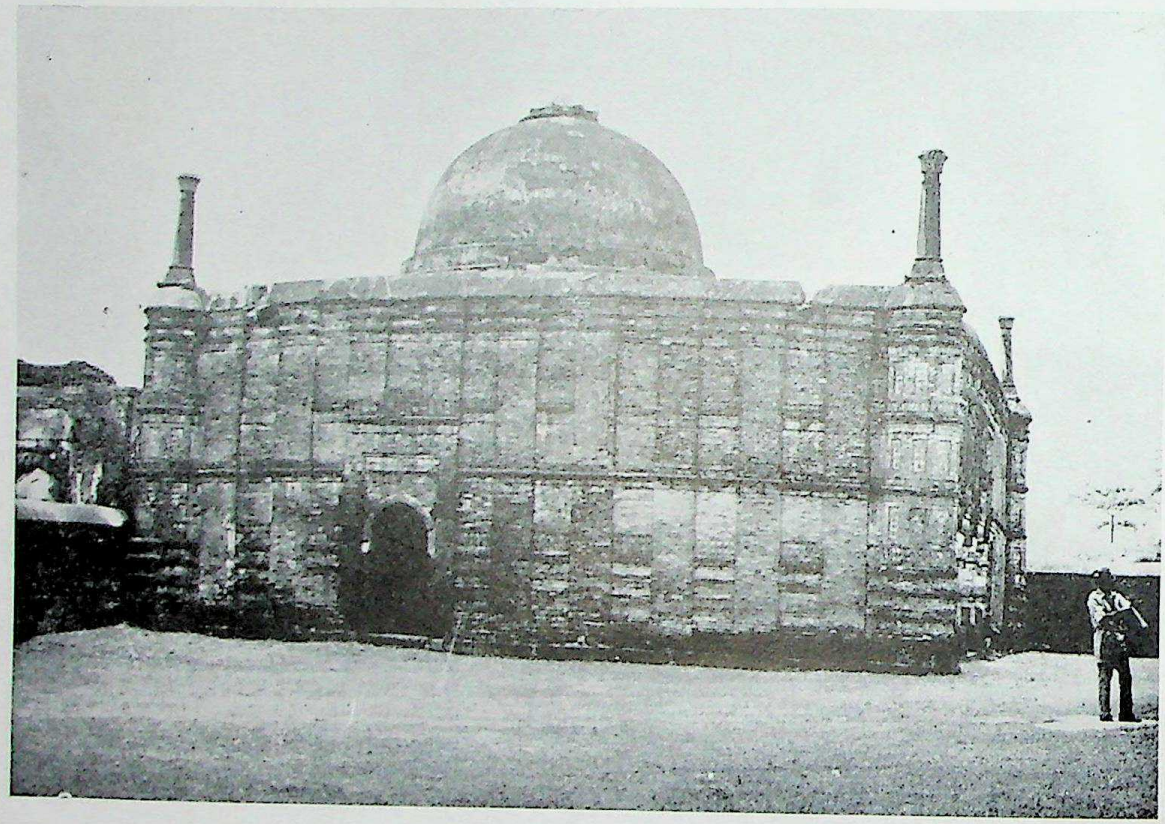
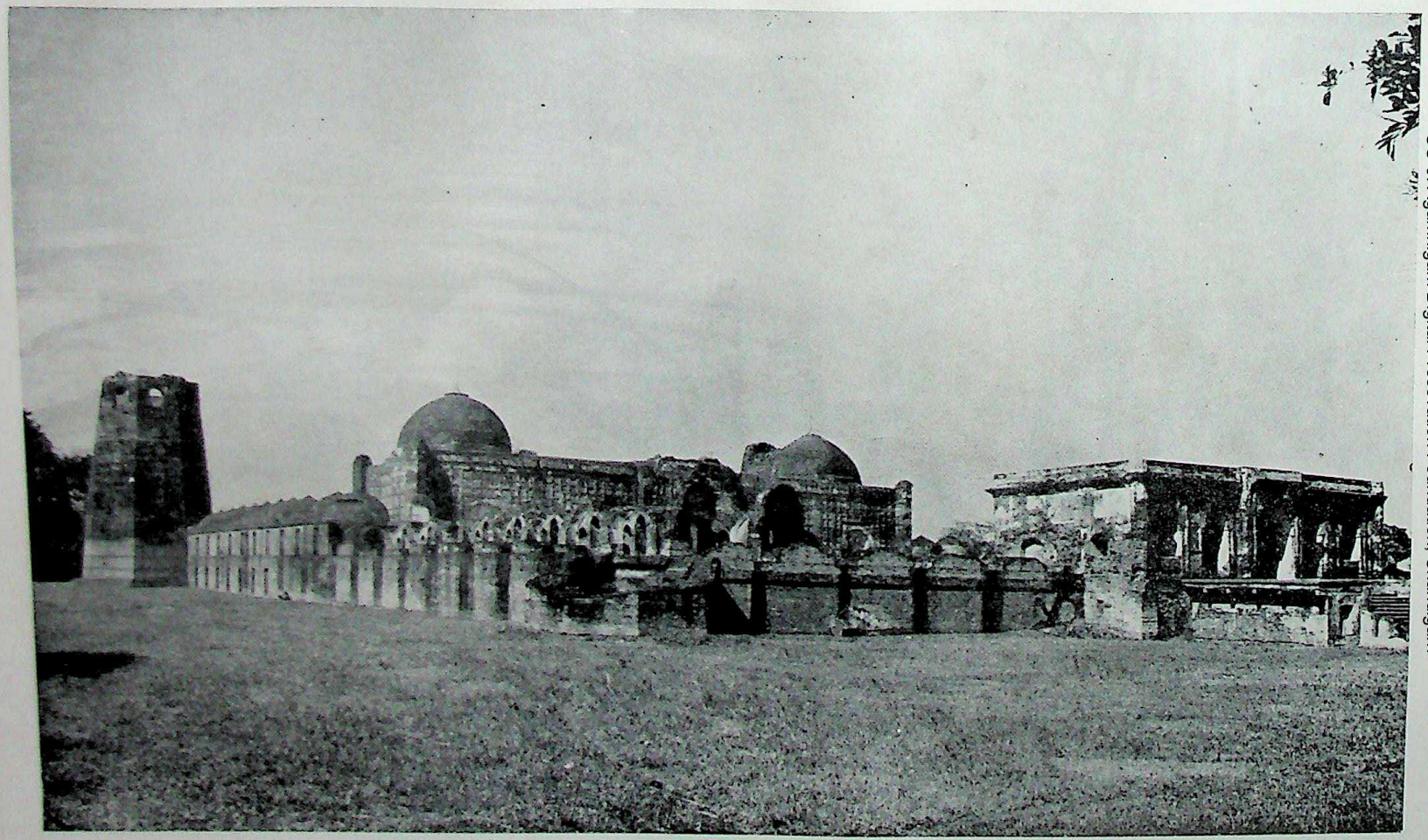
108. Qadam Rasul, Gaur, West Bengal.

109. Tomb of Fath Khan, Gaur, West Bengal.



110. Katra Mosque, Murshidabad, West Bengal.



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111a & b. *Minars* of Bengal Mosques of pre-Mughal phase) Pandua Minar (1375), Gaur, Firoz Minar (1375).

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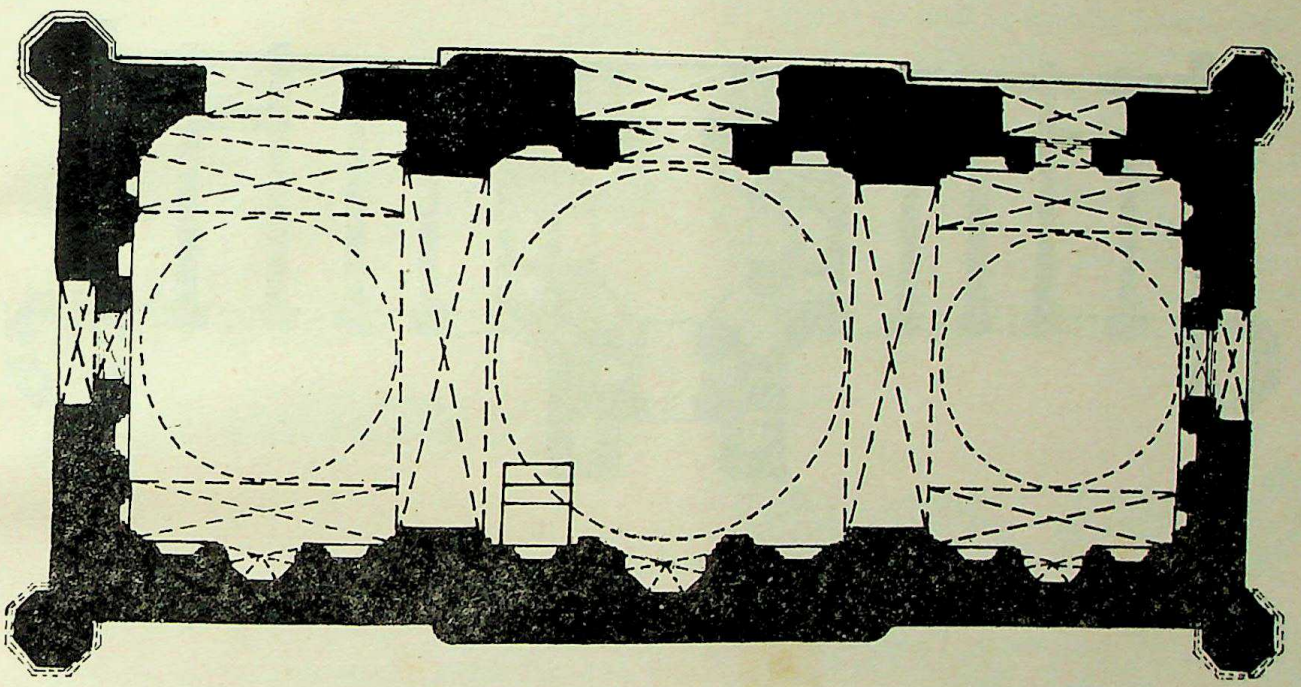
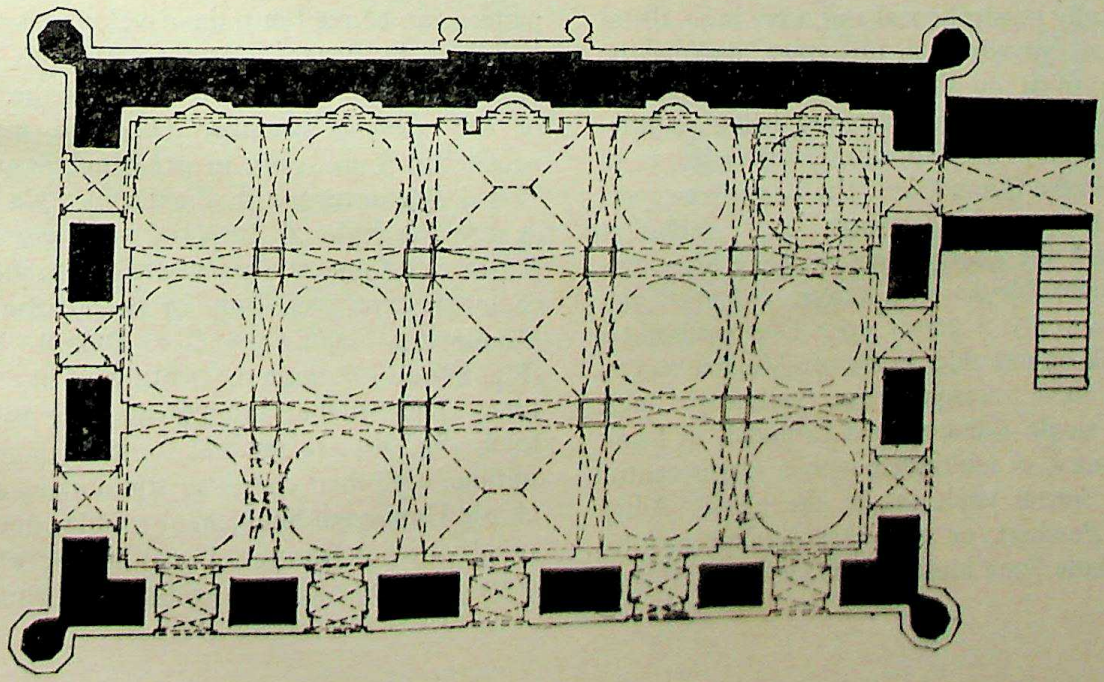
86. *Lal Bagh mosque, Dacca*
87. *Chota Sona masjid, Gaur*





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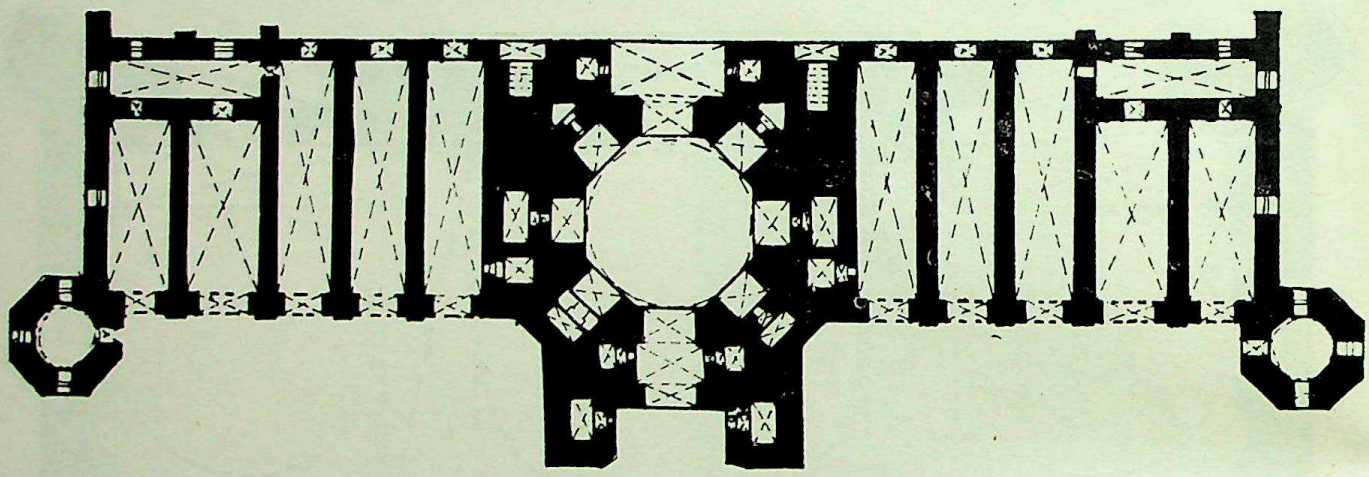
88. *Bara Katra mosque, Dacca.*



heavy and ornate stone pillars. The outline of the dome is fully hemispherical and there is *no* drum part at all anywhere in this stage, making the squatting of it on the lower part of the hall, contrived by pillar supports fixed below, primarily—the squinch itself appearing only as late as in 1512, as in the Gumti Gate. The Bengal mosques do not have open courtyard; *livans*, ablution ponds, and the attached *minar*. They are compact, single blocks with prayer chamber and sometimes only a grassy open courtyard and a large tank on one side. In the pre-Mughal stages, further, these mosques are variously single domed, single dome with a varandah in front; multi-domed, or multidome with a larger central nave or barrel vault (as in the classic Adina Masjid, Pandua), or with *chauchala* hut roof (as in the Chota Sona mosque at Gaur). Dani is right in presuming that no 'organic' evolution of pattern can be read into the development of these buildings in Bengal. Certain variations of style are seen in the Mughal period, as in the absence of the *Zenana* chamber (*Badshah ka Takht*) which are found only in pre-Mughal examples. This is also in tune with the Delhi style as well, as also the regional Imperial style elsewhere at Malwa and Gujarat also, where again, the *Zenana* chambers are seen only in pre-Mughal stages. Monumental gateways like Dakhil Darwaza (Fig. 89) also became the feature of the Mughal times. The Mughal monuments like Bibi Pari's tomb (fig. 90) are notable for their daintiness of outline, with their characteristic domes, after the classic Humayuni/Shahjehani profile, and clarity of elevational features. Local styles, when they copy the blind niches in grid-pattern on the faces

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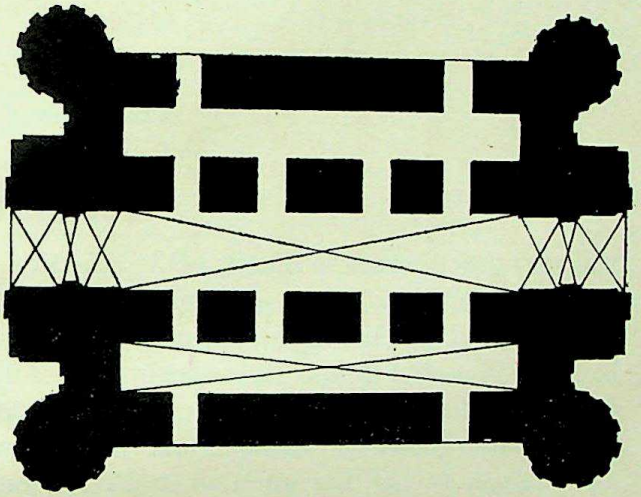
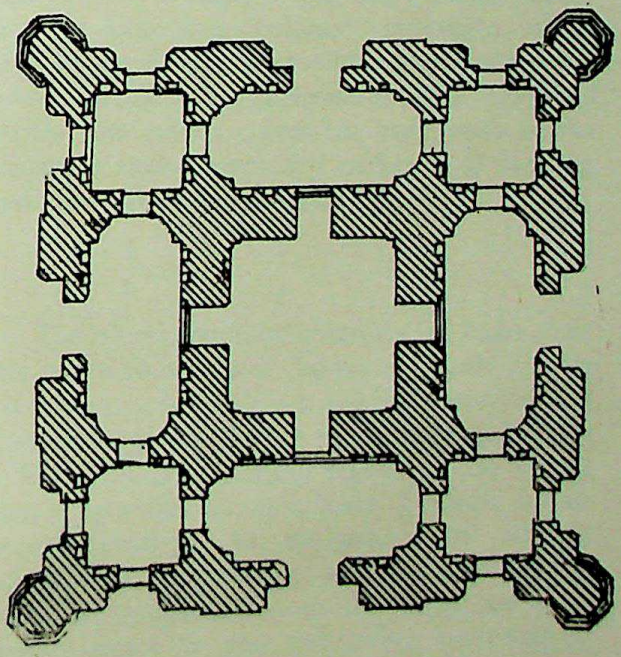
89. *Dakhil darwaza, Gaur.*



90. *Tomb of Bibi Pari, Dacca.*



of the walls and the corner minarets, as in the case of the tomb of Haji Khawaja Shahbaz (1679), Shah Muhmmad mosque at Egarisindur (1980) and the mosque at Gurai (*c.* 1680), together with their heavy ponderous domes, give an illusion of their close similarity to the Bijapur Gol Gumbad mausoleum of the Adil Shahis (also A.D. 1680). This was leading Banerjee, perhaps, to the conclusion that this was caused in Bengal, by emulation probably due to the long stay of Murshid Quli Khan or Kar Talab Khan of Murshidabad in the Adil Shahi court. But, in the typical characteristics of the mosque concerned, in interior as well as exterior devices, there is hardly any comparable technique, between Bijapur and Bengal, notwithstanding the visual illusion. The architecture of Bengal, in sum, is a most elequent digressionary arche-type of the local genius of Indian craftsman and where normal secular architectural principles had a forceful influence, even on the Islamic architecture, without any borrowal from any other source or region and *metier*.

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Ten

J. Leafing Back

The art of the period of Aurangazeb—the last Mughal—has not been dealt with in this study despite the Pearl Mosque of Red fort, Delhi which is a sheer craft continuation of Mughal master artisans of the metropolis; and of Bibi-ka-*maqbara* at Aurangabad (Deccan) which is a grandiose effort shaming the Taj at Agra by its presumptuous simulating effort—through truly provincial craftsmen, which had failed on this score; because both mentally and intellectually this last Mughal, with his Sunni conventionalism and spartan outlook frowned upon any thing sensually beautiful or creatively artistic. While several monuments ascribable to his age can indeed be cited, their architecture did not bring out any further evolution or innovation or even radical departure from any of the known norms of the Mughal style but only retarded them by undiscerning patronage. Besides, a few centres of the 18th century A.D. like those at Murshidabad explain this phenomenon even in the regions Even the tomb of Safdarjung in Delhi (1757) despite its orderliness and size is a 'static' model, without any inspiring dynamism or harmony or repose. Indeed craft was then, even in Delhi, passing off as art, and from a patron with such rugged reflexes who could reconcile himself with his stripping of Abdur Rahim Khani-Khanan's mausoleum of its veneer stones of marble to build his; one could not expect more. Thus it puts itself outside the purview of a meaningful furtherance of the matchless elegance of the period of Shahjehan. After Taj had become the epitome as well as the epitaph of 'live' architecture under Islam, 'stereotypes' like Zinat-ul-Masjid and Sunehri masjid, just kept shuffling their feet for a while, before being swept off their feet by European colonial onslaught which negated their very *elan* and significance in a subtle manner, by superseding their temporal worth. The author craves the indulgence of the reader for such a summary eschewal of building traditions after Shahjehan's times.

x x x x x

x x x x x

The Islamic building enterprise in India dealt with in the above pages, however, would in the first instance, have shown the legitimacy for the close examination of what vicissitudes and glory in India, in the onward march of the ruling Islamic dynasties, it underwent. It would be an oversimplification to designate the Islamic architectural annals as a sequential growth. It would be uncharitable, on the other hand, to underestimate the new awakening it created in art, the several original and stimulating exercises in formal delineation, exuberance and aggregation that their architects had displayed—be they totally indigenous and those growing with the movement, or trained exotic experts giving special contributions to motifs, mannerisms, technical

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devices or ornamental *milieu*. Above all, in the refinement and the restoration of the prayer chamber of the mosque to its own equilibrium and in the layout of the ancillary structures to their environmentally pleasing outline to subscribe to this new religion brought into India through invasion and conquest, but which mellowed and occupied a worthy part of the landscape of religious art in equal partnership with the culture of land, a most significant catharsis and amalgamation of opposed faiths had been brought about. The role of creative art—which is timeless and classless—in having helped in this consummation cannot be adequately estimated. The approach to art as between Hinduism and Islam was admittedly polarised, but the centuries of variations and experience habituated them to the mode for abstracting form out of concrete parts, and had yielded lasting results.

This, in itself, is the very purpose of architecture at its best, and in Islamic style, it is all the more helped, due to the non-representational character of the symbolism. Suffused rhythmic inter-relationship of parts, whether on the exterior profile or the interior mask, is persuasively highlighted by an occasional deliberate emphasis on the soaring verticality, through the *minar* and facade devices. In Hindu architecture, the inherent balance between sculpture and architecture, combined with the static elevational shoot of the spire, presents the picture of a fully grown lofty tree, laden with blossoms, fruits and foliage. In Islamic architecture, the symmetric quality of the component members in mosque and tomb sculptures, besides secular erections, introduced the scope for a pure architectural essaying where the design is not merely empirical but is also cultivated and refined, and thus permits a total exterior silhouette which is the exact reflection of the interior shell. This direct releationship between plan, interior outline and exterior skyline is the best seen in the culmination of Mughal art. Surface ornamentation in arabesques and chosen motifs, geometric as well as floral, amidst the pilasters, walls, intrados, extrados, spandrels and the inevitable *mihrab* are no doubt day light distinctions, but in a cold and weak light, it is the natural contrasts of the stones of the building that, along with the magic of their outline, contribute to the visual spectacle. The equilibrium of solids and voids, of the spirit and substance is more emphatic in an Islamic mosque or a *maqbara* than in a Hindu temple where symbolism plays primarily upon the principle of a corporate divine body whose outline and structural rhythm underscores mainly the dynamism of the spark of divinity enshrined within, though inspired silhouettes are not rare in every region. Unlike this however, an Islamic monument is more a case of secular dimensions outdoing the spiritual, but unlike the Hindu temple, again, where a progressive elimination of formal glory is seen, as one moves towards the sanctum, terminating in the concentrated monotone and monolith of the image within it, the Islamic mosque distributed its art-*largesse* evenly over every part of the monument in deliberately balanced proportions and focussed this synthesis ultimately on the innermost central *mihrab* the dome and on the facade, which are rendered in the most articulate best. Thus, while the Hindu ideal is of merging one's inner self in the stillness and solemnity of the sanctified image recess—the womb shrine—and to come out of its glorious man-made panorama, the Islamic *penchant* is to

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keep aloft the light of the divine for everyone to scan and to be led properly by that lodestar, hence even the term *mihrab* has seemingly associations with solar or stellar lustre.

The long day of deliberate formulations and conscious cross-fertilizations of the indigenous and the imported art and craft-genius of Islamic architecture reached its zenith in the Mughal style upto Shahjehan, and was a blend of curve and line in stone and plaster. The choice of marble by the Mughals was, *inter alia*, favouring the merging of the stone work and plaster work, and the Mughal shell lime plaster at its best, is visually inditinguishable from marble, in its tones. This was further enhanced by an assiduous artistry of its landscaping and formal garden—the 'garden of paradise'—which is itself a Persian concept and brings the Paradise down to the earthy soil. From the amorphous disarticulations of the Sultanate structures where the vertical and the horizontal had no organized inter-relationship, to the next stage of a thorough and ponderous devaluation of glamour in favour of a unitary texture of plaster; alternatively to the sharp contrast between sandstone-built ground storey and plastered dome and with an esoteric privacy of the low and heavy pillared interior layout of the Tughlaq-Lodhi commitments; and finally, to the etherial, floating and well ventilated formulations of the Mughals, with a transparent veil of scintillating ornament in the form of surface workmanship, was a transformation of the architectural media into a magnificent duality of both masculine and feminine graces. Neither in West Asia nor in North Africa nor the Mediterranean Spain has this disciplined ornamentation, the extrovert virtuousity of veneering embellishment and the suffused cohesion of the members into a benign urbanity, without either luridness or plainness, has been achieved, as it has been done in India under the Mughals. Their court art had thus reflected expansiveness as well as cohesiveness, of constituent composition as well as unity, of splendour as well as a firm spiritual *focus*.

In our attempts to understand these historic and formal ramifications of this building enterprise of Islam in India, we had seen:

(i) that it would be palpably unavailing to consider its early modulations of the arch as just groping in the dark, but only as in inherent organisational teething trouble, when indigenous craft potential and local material are mainly to be depended upon. It would be illogical that when already for more than three centuries, the arch and vault had been prodigiously promoted in West Asia for Islamic edifices, this heritage should have been unknown to the new masters in India who were the ethnic heirs to that legacy. But political conditions wherein a violent temporal transformation had been brought about created inevitably a cultural vacuum, which is filled only the Khilji times, by intrusive Seljuk impulses and ideas, and perhaps of its craftsmen as well; and that momentum was enough to launch the true arcuate style. That they laboured with the trabeate tradition also would only be a tribute to the native realism, in those stages of a progressively indigenised Islam.

(ii) We have also found that the Sultanate period was indeed, in another sense, a formative stage where no firm traditions could be established in the selection of the raw material, to reflect a particular cultural or aesthetic *ethos*. It was not averse to mixing usages by even a re-use of the

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carved stones in the *quondam* Hindu temples, but a preference was, however, shown for surface ornamentation in ashlar sandstone or marble bands and calligraphic and floral motifs, strengthened by architectural articulations like cut-plaster designs and in the 'pot-and shaft' type. It opted also for the prevailingly flattish roof, unadorned by any domes—which appear to rise only from the second Slave king and even then was a re-use or simulation of the ornate cusped or denticulate Hindu *nabhicchanda* and *kshipta* types of ceilings, in the interior, with exterior alone smoothly finished in plaster, in a single-domed profile. Even the domes were perhaps used only for corner buttresses and the like and not regularly over the comparatmentalised ceiling grids. Single lofty *minars* (like the Qutb minar or the *minars* of the Jami Masjid, as it was always called) on the West Asian parallels was preferred; and even Allauddin's addition of a second *minar*, by its dissimilar proportions, was intended to be asymmetric and distinctive on its own count. The screen arch or *maqsura* was the *first* most distinguished innovative contribution on the Islamic side of the early Sultanate art—a device which continued for long to mingle and merge everywhere in India, in due course, with the facade pattern of any mosque or *maqbara*, and was therefore a fundamental gift. It believed in a four cloister scheme with a large central courtyard which, again, it consistently practised, though yet with a multitude of variations in extent, volume and craftsmanship. It gave a staired access to the terrace in almost all its mosques, either through *minars* or otherwise, and integrated it invariably in the core-thickness of the wall. Only in western India (Gujarat) and Deccan, besides the Mughal, it provided a clerestory for the central bay, to highlight the main *mihrab*-again on several West Asian examples.

It provided for a *madrasa*, as a centre for religious education, either integrated with a mosque or separately as unitary edifice, denoting the dovetailing of political and religious activities in the realm, but this institution was much less in preference, during the Mughal times, owing to the low key operation of religion in State policy, except under Aurangazeb.

(iii) We saw that the *true arch*, as it emerged finally in assured application, was clearly post-Sultanate and Khilji, though yet with some stages of incipient origin, and had quickly and phenomenally expanded by early Tughlaq times, consistently with the compulsive utilization of rubble stone and mortar in the larges scale constructional programmes. We shall not therefore, be liable to consider 'Balban's tomb' as giving us the first 'true-arch', because it would be an anachronism. Balban's tomb, as it stands *now*, is a clear Tughlaq renovation, with only bare fragments yet visible of its Khilji and even possible late Sultanate original erection during Balban's times. At the same time, that this was the venue of Balban's tomb is more than evident. We shall consider, thus, the Khilji times (through his Alai Darwaza, Jamaat-Khana mosque and transitional developments in the *Alai madrasa*—as the finite introduction to the true arch and vault. We have also no organic vestige in Delhi or elsewhere which can be most unambiguously attributed to Balban's period, on independent grounds.

(iv) We have also seen, however, how Balban's *Dar-ul Aman* was not a myth or a lost vestige, but

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an identifiable location, as described in the contemporary records, including *Futuhat-i-Firoz Shahi*, and has a configuration of an enclosed area seen around the tomb of Balban, including what could either be a gate structure or might as as well have been the tomb of Mohammad Bin Tughlaq. Its position outside Lalkot clearly ties up with the reference in contemporary records about Balban's death and removal of his body from the Red Palace and burial, outside the fort wall, in *Dar-ul-Aman*.

(v) We have seen that the tomb of one of the two sons of Sultan Ghari (himself the son of Iltutmish) which Firoz repaired, in Malikpur village is still amenable to being examined for the details of what would have been the original creation and what was Firoz's renovation.

(vi) We have seen that the structure of the Khilji-Tughlaq transition in Jehanpanah in the seemingly identifiable area of Hazar Sithun Palace yields, together with the structural evidence at Tughlaqabad, sufficient data on the Mohammad phase, grading into the Firoz phase there. The Khilji phase is separetely seen in the lower level domed structure which had much in common with Jamaat Khana mosque in technique and form. A similar Khilji phase is also perhaps noticeable in the lower level galleries of Hauz Khas.

(vii) We have seen that the Idgah outside the Qila Rai Pithora walls on the West, while itself being essentially a Tughlaq creation *in* its *restoration*, as it stands today, as substantiated also by quite a few other Tughlaq structures aroud it, could be the Idgah which Timur visited soon after invading and conquering Delhi, but the context of the reference in *Malfizat* which has a juxtaposition to a certain description of the Fort of Siri, could also make the Idgah at Kharera (which is also a mature Tughlaq structure with certain pre-Tughlaq elements) the subject of this visit and court of victory celebrations. Both of them have a central passage across—which is a feature only of early *Idgahs* in India, but regular even in mosques in West Asia. The only *Idgah* in India incidentally which can claim chronological precedence to these two is located at Badaun, and by the typical features clearly recalls its kinship with early Sultanate mosques of Qutb-Delhi and Iltutmish-Ajmer (Arhai-din-ka-Jhonpra).

(viii) We have seen how Firoz Shah was not only an innovator for canals, conduits and systems of wells fully lined with terracotta pipe lines and cisterns (as in the circular *baoli* inside Kotla Firoz Shah), but was also a great technician in the layout of stair passages and core tunnels—as in the Jami Masjid back wall at Kotla and has laid out the only city without the city walls, where accent is on the civic amenities, raising of public structures, maintenance of old ones by repairs and adding of spectacular ones, such as his totally imaginative pyramidal cellular structure for Asokan *lat*, his *Shikargah Kushaks*, one of them with a Sun—dial, and his organisation of his citadel itself with the most compact and functional arrangement of Palace-complex, *Diwani-am*, Guards quarters and outer and inner main gates, bridged passages, etc. Outside, in his city, he set the vogue for the systematised architectural styles of Jami mosques, as at the Khirki, Kalan, Begumpuri and Kali Masjids. It was also he who refers to even the much-guessed location

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of Sultan Razia's tomb as being within his outer city limits. Firoz Shah's vogues became the real and substantial base for the best part of Sharqi style at Jaunpur and the later Khilji style at Mandu. His period was a clear evolution of the scope of common raw materials, restrained ornamentation, decorative motifs in cut plaster and tile innovations for pillared pavilion tombs, college (*madrasa*) and in a variety of ceiling, gable and barrel vault forms—the most advanced of the former being the 'flat-arch' type without any squinches on the corners and with a central stone pendentive lid to cover the crest of the ceiling.

(ix) We have seen how the Sayyid and Lodhi styles continued the Tughlaq style in double storeyed wall sections; the first introduction of the double-dome device and battlemented entablature on walls but without the use of plaster skin for walls generally and with a coursed cut stone masonry wherein grids were organised both vertically for the central jambed facades of the prayer chamber, and horizontally for courses for the under-cornice; balconyed end chambers of the corner of the prayer chambers and providing also for staircase were prominent, as in the Kotla Mubarakpur monuments, Lodhi tomb-complex and Masjid Moth.

(x) We have found how the Bengal and Gujarat broke away from the Imperial Delhi style to evolve a down-to-the-earth regional and indigenous forms suited to the *quondam* heritage of the area and craft skill, while Panjab was the *mother-matrix* for the best part of the Tughlaq-to-Lodhi formulations (as seen at Multan). The exclusive characteristic of the *dochala* and *chau-chala* types of Bengal with a covered mosque chamber, drumless domes and *minar*-less fronts and excessively ornate tile and terracotta work of the tympanic zones of *mihrabs*, match only with the strident *minar* on the facade arrangement in Gujarat, in a cascading crescendo of levels and sizes for the domes on the roof, rising to the central largest dome, set on a clerestoreyed upper roof yielding light and ventilation and introducing a near total eschewal of the *arcuate* style until only late 17th century A.D., and a drastic elimination of full scale Mughal models, as we find in *its* Sultanate period from early 15th century to late 17th preceded by glorious Pre-Tughlaq and Tughlaq style starting from 1300-1375 as at Broach, Cambay and Mandal. Both in surface ornamentation and elaboration for entrance porches to Jami Masjids, Gujarat style becomes a distinctive zone, and its step wells are, again, a class by themselves for aesthetic and functional devices for the public to enjoy.

(xi) We have seen how the Deccan is a zone entirely cohesive in its formulations, motifs, raw materials, mosque, facade—formula, square sectioned *minars* (more popular in the upper Deccan and Khandesh areas) progressively becoming slender and lofty and kissing the sky, as in Adil Shahi and Qutb Shahi stages of the fort of Bijapur and Golkonda; in the centrally placed citadel and palace-complexes revealing predominantly trabeate principles of medieval style, while all the while its mosques are totally arcuate in form. In the interior construction, storeyed arrangement of the terraces leading to the dome structures of mosques and tombs and a plethora of *guldasta* type of miniature minerets punctuating both the outer edge of the main wall merlons

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and upper dome merlons were seen. Its earliest, phase, under the Bahmanids put forth several distinctive models, like the unified double chambered tombs (as at Ashtur) and octagonal ones without any dome; and its own later phases manifest the frontage with straight cornice and circumambulatory galleries below the domed ceilings on the inside (as at Gol Gumbad and Jod Gumbad), low cut-plaster ornamentation and overlapping tendril fringes of the merlons as at Bidar (Baridshahi times) and in Golkonda (Qutb Shahi times), besides the finest interlaced plaster-cut-honey combed spandrels of the interior of mosque, showing the chastest Turkish Persian devices. The military architecture of Baridshahi times reveals the highest blend of both majesty, elevational rise and non-military aesethtic ornamentation of *chattris* and *jharokas*, even on the fort walls, to be imitated avidly even by Vijayanagara style, as at Hampi and even further south as at Vellore and Gingee; and the finest craftsmanship in mother-of—pearl inlay in fantastic richness, as in Rangin Mahal at Bidar in the close of the 16th century A.D. On the opposite antipodes, in entirely borrowed and amorphous style of Imadshahis and Faruqis in Khandesh as in Chanderi and Burhanpur, in the serpentinous brackets to *chajjas* they show, forming glaring links with Mughal splendour under Akbar and Jehangir, as in the Salim Chisti *Dargah*, Fatehpur Sikri and Jehangiri Mahal, Agra. In its spectacularly large-sized *madrasa* structures, as in Mohammad Gawan's at Bidar with its tile-enriched double *minars* of lofty proportions and in the double-dome of the central of its three winged double-storeyed galleries, they stand out as the finest utilization of Persian influence.

(xiii) We have seen how in the organisation of the fortifications and citadels, traditional as well as innovative models had been practised, in the former of which the Sultanate the Khilji and the Tughlaq periods excelled., while of the latter, Kotla Firoz Shah of Tughlaq times and Lal Qila of Shahjehan in north India and Bijapur (with its central ovoid Ar-Qila citadel rich with palace complexes, within the also ovoid outer city fort) in south India, are outstanding. While, however, the gates of the fort had been all along only traditional and for security alone, we find in the Mughal times the majestic gateway complexes which, notwithstanding their utilitarian role, also become unequalled models of elevational composition, giving a stamp of the unrestrained architectonics that prevailed in that phase.

We have touched upon several other elements which are part of the *ethos* of each stage, tending to show the stark realism of the early ages where power and promise of expansive prosperity in domain and wealth had tended to make the kings ruthless, given to internecine rivalry with other collaterals of the same faith, be they Afghan, Turk or Mughal, or their underdogs, but exceptions were also seen where the scales were often held even by the Sultans among the subjects of the realm, whom only a stroke of destiny had commended to their care or biased exploitation, Deccan, in this regard, was also shown, as forming a separate entity by itself within the Islamic hegemony, and well integrated with the region, and their cultures, making the kings ambidextrous in their dealings in military and empire-building strifes with their near neighbours, by they Hindu or Islamic. The Deccani structures drew pretty little from Mughal or pre-Mughal performances,

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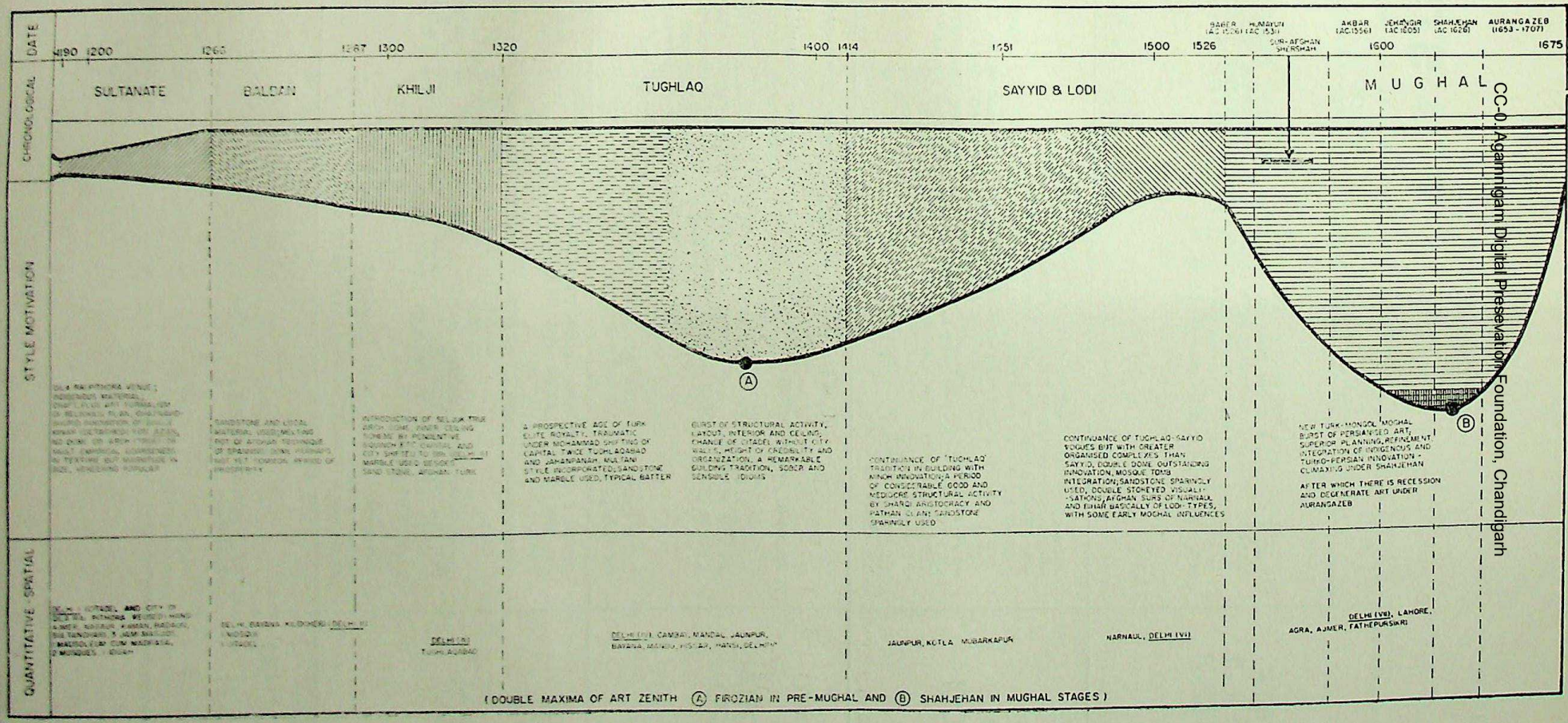
but blazed their own regional trail until the late Mughal times (late 17th-18th century A.D.) when they were appropriated without much ado within the Pan-Indian Mughal empire. Their deep obligations both in culture, linguistic excellences and art were more from Turko-Persian impulses of Ottoman and Safavid West Asia. Between them and the Upper Indian Imperial hegemony in Delhi, lay the buffer zones of Vindhya and Satpura tracts, ruled by the Imadshahis, Faruqis besides the Nizamshahi's of Ahmadnagar, all of whom were constantly at the receiving end both from Imperial Delhi and the Deccani Kingdoms.

It would be difficult to use the medium of architecture to eke out anything but the visual structural programmes initiated by the Islamic powers in various parts of India, but sufficient direct and indirect evidence revealed even by the buildings themselves, which are material indices of both their secular and religious propensities, go well with the contemporary textual chronicles. They form, the most objective thrust of this study in the vicissitudes and mannerism involved in them, the obligations they show to both the region and to the total *ethos* of the age. If something of this kalaedoscopic diversity has been revealed by the present study, it would only confirm the view firmly held by the author, as an archaeologist, that it is the material remains of life or art of a region or an age, even upto the historical and Medieval times we are here dealing with, that truly light the lamp of history, otherwise ridden with polemical contentions; and make it live in the minds and hearts of the people as a precious heritage.

Appendix I

IMPERIAL ARCHITECTURAL MATRIX UNDER ISLAM

CHART - A


DATE
CHRONOLOGICAL
STYLE MOTIVATION
QUANTITATIVE SPATIAL
1190 1200
1266
1287 1300
1320
1400 1414
1451
1500
1526
BABER (AD 1526) HUMAYUN (AD 1530)
SUR-AFGHAN SHERSHAH
AKBAR (AC 1556)
JEHANGIR (AC 1605)
SHAHJEHAN (AC 1628)
AURANGAZEB (1653 - 1707)
1600
1675
SULTANATE
BALBAN
KHILJI
TUGHLAQ
SAYYID & LODI
MUGHAL
A PROSPECTIVE AGE OF TURK ELITE ROYALTY, TRAUMATIC UNDER MOHAMMAD SHIFTING OF CAPITAL TWICE TUGHLAQABAD AND JAHANPANAH, MULTANI STYLE INCORPORATED, SANDSTONE AND MARBLE USED, TYPICAL BATTER
BURST OF STRUCTURAL ACTIVITY, LAYOUT, INTERIOR AND CEILING, CHANGE OF CITADEL WITHOUT CITY WALLS, WEIGHT OF CREDIBILITY AND ORGENIZATION, A REMARKABLE BUILDING TRADITION, SOBER AND SENSIBLE IDIOMS
CONTINUANCE OF 'TUGHLAQ' TRADITION IN BUILDING WITH MINOR INNOVATION, A PERIOD OF CONSIDERABLE GOOD AND MEDIOCRE STRUCTURAL ACTIVITY BY SHAHQ ARISTOCRACY AND PATHAN CLAN, SANDSTONE SPARINGLY USED
CONTINUANCE OF TUGHLAQ-SAYYID VOGUES BUT WITH GREATER ORGANISED COMPLEXES THAN SAYYID, DOUBLE DOME, OUTSTANDING INNOVATION, MOSQUE TOMB INTEGRATION, SANDSTONE SPARINGLY USED, DOUBLE STOREYED VISUALISATIONS, AFGHAN SURS OF NARNAUL AND BIHAR BASICALLY OF LODI TYPES, WITH SOME EARLY MUGHAL INFLUENCES
NEW TURK-MONGOL MUGHAL BURST OF PERSIANISED ART, SUPERIOR PLANNING, REFINEMENT INTEGRATION OF INDIGENOUS AND TURKO-PERSIAN INNOVATION - CLIMAXING UNDER SHAHJEHAN
AFTER WHICH THERE IS RECESSION AND DEGENERATE ART UNDER AURANGAZEB
DELHI (VIII), LAHORE, AGRA, AJMER, FATHEPURSIKRI
DELHI (I), CAMBAY, MANDAL, JAUNPUR, BAYANA, MANDU, HISSAR, MANDI, DELHI (II)
JAUNPUR, KOTLA MUBARKAPUR
NARNAUL, DELHI (VI)
DELHI (III) TUGHLAQABAD
(DOUBLE MAXIMA OF ART ZENITH (A) FIROZIAN IN PRE-MUGHAL AND (B) SHAHJEHAN IN MUGHAL STAGES)

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Appendix II

STYLISTIC AND

	UPPER INDIA	GUJARAT AND MALWA		
SULTANATE KHILJI (1200-1320)	TRABEATE UNTIL END OF 13th CENTURY, KHILJI ARCUATE, RUBBLE STONE CORE AND SANDSTONE VENEER OR CUT SANDSTONE WORK ENTIRELY, STILTED PILLARS FOR HALL & CLOISTERS, MINAR SINGLE & SEPARATE, SQUINCH INTRODUCED, FLAT ROOF EARLYER, DOMES WITHOUT DRUM	TRABEATE BEGINNING FOR MOSQUE; FLAT ROOF AND CORNICE, DOMES (DRUMLESS) OCCASIONALLY	NO ISLAMIC STYLE CURRENT IN MALWA AT THIS STAGE	
TUGHLAQ (1320-1400)	HIGH-LIGHTED BY FIROZIAN ERA OF ARCHITECTURE; ARCUATE PRIMARILY BUT WITH ENTRENCHED TRABEATE STONE WORK MANNERISMS; SEPARATE MINARS DISAPPEAR, BATTERED WALLS; SINGLE AND MULTIPLE STOREYED PALACES, RUBBLE STONE AND PLASTER ESSENTIAL MEDIUM CUT PLASTER DESIGN ELEGANT, WITH TILE WORK ALSO WIDELY USED FOR SPECIAL STRUCTURES, ZENANA GALLERY SEEN, SQUINCH USED, PYRAMIDAL DOME - A TYPE - FOSSIL OF THE STAGE, WITH HIGH DOMES ALSO SEEN (WITH DRUM OCTAGONAL)	TUGHLAQ MODEL SEEN, STILTED LOFTY PILLARED MOSQUE CHAMBER, ZENANA GALLERY EXTANT	ARCUATE PYRAMIDAL & FLUTED DOMES IN MALWA	1351-88
PRE-MUGHAL (1400-1520)	(CRAFT REGRESSION DUE TO TIMURID DISTURBANCE OF LIFE & ACTIVITY) ARCUATE ALMOST ENTIRELY RUBBLE AND PLASTER MEDIUM, VENEERED STONES SPARINGLY SEEN — NO MINARS, BUT SMALL MINARET MOTIF PREVALENT, TUGHLAQ DEVICES CONTINUE SQINCHES STILL IN USE DOUBLE DOME AS WELL AS SQUATTISH SINGLE DOMES EXTANT	REGINAL STYLE DEVELOPES, STONE WORK ARCUATE, STILTED PILLARS, MULTIPLE DOMES IN DIFFERING SIZES; CLERESTORY; MINARS (STAIR CASED) ON FACADE; ORNATE CHAJJAS FOR ENTRANCE PORTAL ZENANA GALLERY EXTANT.	HEAVY DOMES BUT NO MINAR IN MALWA	(1415-35) ILYA (1435-93) (1495-1538)
MUGHAL (1526-1707)	ARCUATE WITH VARIETY; SAND STONE, MARBLE AND BRICK-PLASTER MEDIA; ALL PROFUSELY PREVALENT SEPARATE MINARS RARE (TAJ) — NO SQUINCHES; ONLY MINARETS, DOUBLE-DOMES; SECULAR, RELIGIOUS, MILITARY ARCHITECTURE DISTINGUISHED; SINGLE STOREYED, HORIZONTAL LAYOUT PREFERRED FOR PALACES (RARELY DOUBLE STOREYED) THREE STAGES PRE-AKBAR, AKBAR-JEHANGIR AND SHAHJEHAN } DESIGN ELEMENT EFFLORESCENCE	REGIONAL STYLE ARCUATE, STONE WORK CONTINUES; ARCUATE USAGE PARTIAL, MOGHAL INFLUENCE MARGINAL; MINARETS SOLID AND TAKEN TO ENDS OF FACADE	MALWA BECOMES PART OF MUGHAL EMPIRE IN THE LATER PART OF THIS PERIOD BORROWED FEATURES WITH LOCAL CRAFT STANDARD	(1608-1675)
LATE MUGHAL (1707-1857)	NO MINARS, ONLY TALL MINARETS — ARCUATE; STYLISED			

NO MENTIONABLE

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VOLUTIONARY TRAITS

BENGAL	DECCAN AND LOWER SOUTH
SULTORY MOVEMENT OF ARCHITECTURE AMLUK – DELHI INFLUENCES OSQUE OF ZAFARKHAN GHAZI (1298)	
YAS-SHAHI STYLE - I (GAUR) RICKS AND STONE VOGUE FLUTING; ACETING; OCTOGONAL AND TWELVE-SIDED NARS; PROFUSE DESIGN WORK IN ERRACOTTA AND TILE IN MIHRAB YMPANUM DO-CHALA VAULTED TRUCTURES.	BAHMANID ARCUATE STOREYED PALACES, DRESSED COURSED STONE CORE WALL ENCAUSTIC TILE AND CUT PLASTER ORNAMENTATION PROFUSE TUGHLAQ INFLUENCE MARGINAL; TRABEATE; DAULATABAD JAMI MASJID LATERITE AND DRESSED STONE FORTIFICATIONS LARGE TALL MINAR CURRENT
KLAKHI STAGE (PANDUA) HAHI PHASE - II (GAUR) HAU-CHALA TYPE RICK MASONARY ARCHES ON STONE PILLARS; OMES WITHOUT DRUMS; WO-CENTRED POINTED RCHES, NO OPEN COURT- YARD, QUINCH ONLY FROM 1512 UMTI GATE) HUSSAIN SHAHI HASE MID 15TH TO EARLY 16TH KHANJEHAN PHASE (BAGERHAT)	LATE BAHMANID AND OTHERS ARCUATE ENTIRELY MINARS POPULAR STOREYED PALACES ENCAUSTIC TILE AND CUT-PLASTER ORNAMENTATION DRESSED STONE AND PLASTER STRUCTURES MOSTLY SLENDER ARCHED WINDOW PROFUSEY USED DOUBLE DOME SEEN
OVENT OF MUGHALS, (1595)-RAJMAHAL LASTERED WALLS, FOUR-POINTED ARCHES; HOULDERED DOMES IMPERIAL MUGHAL (DACCA) HORIZONTAL PARAPETS BLIND MERLONS JAMBS WITH FALSE-ARCH SERIES MURSHID QULI PHASE (MURSHIDABAD) DESIGNING AND ELEVATIONAL VOLUME CHANGES (ACUTE STYLIZATION) 1700 ONWARDS	ENTIRELY ARCUATE CHAJJAS (CORNICES) AND PROFUSE CUT PLASTER & ENAMEL DECORATION DOMINANT MOTHER-OF-PEARL INLAY FOR DESIGN AS WELL AS INSCRIPTION MINARS VERY POPULAR (MINARETS PROFUSE) STOREYED PALACES MADRASAS DEFENCE DRESSED STONE AND BRICK CORE EMPHASIS ON INTERNAL DECORATION & EXTERNAL PLASTER WORK TECHNOLOGY IN ARMOURY; FLORAL LORE
	DRESSED STONE OR BRICK CORE CUT PLASTER CRAFT ENTIRELY MINARS AND MINARETS AT CORNERS (WITH TILE OR ENAMEL SPARINGLY) STOREYED PALACE AND BUILDINGS WITH DIVAN-I-KHAS AUDIENCE HALL ATTACHED (SRIRANGAPATNA, HAMPI & GINGEE)

AMIC EDIFICES EXTANT

VIABLE STYLISTIC AREA LARGELY UNINFLUENCED BY UPPER INDIAN VOGUES

Appendix III

ISLAMIC ARCHITECTURE : INCIDENCE OF ZONAL STRUCTURAL FEATURES IN INDIA

	MONUMENT / FEATURES													
1	SINGLE DOME OR NO DOME WITH FLAT ROOF AND TRABEATE STRUCTURE	JAMI MASJID BROACH (1300)	JAMI MASJID MANDAL (1350-75)	JAMI MASJID CHANDERI (16th CENTURY)	LAT KI MASJID DHAR (c 1400)	BHOJ SALA OR KAMAL MAULA MASJID, DHAR (c 1400)	JAMI MASJID DAULATABAD (c 1300)	QUTB MOSQUE DELHI (1225)	ARHAI-DIN-KA JHONPRA (1225)	KAMAN MASJID (c 1275)	UKHA MASJID BAYANA (c 1300)			
2	ARCHES, SCREENS WITHOUT KEYSTONES VOUSSOIRS IN OVER SALING COURSES	QUTB MOSQUE DELHI (1225)	ARHAI-DIN-KA JHONPRA, AJMER (1225)	SULTAN GHARI DELHI (1231)	KATI GHATI GATE CHANDERI (c 14th CENTURY)									
3	PYRAMIDAL DOMES	SULTAN GHARI MOSQUE ROOF (RE-PAIRED) (1351-83)	DAR-UL-AMAN ENTRACE GATE HOUSE DOME (1351-83)	PATTHAR MASJID SRINAGAR (c 1400)	JAHAJ MAHAL MANDU (c 1460)	BARAKHAN Etc BEGUMPUR, DELHI (TOWER) (1451-1517)	SHAH DAULAT DARGAH MOSQUE MANER, (1629)							
4	ARCHES WITH DAGGER-PROJECTION RIMS	ALAI DARWAZA DELHI (1305)	JAMAAT KHANA NIZAMUDDIN, DELHI (1320)	TOMB OF GHIASUDDIN TUGHLAQ, DELHI (1325)	UKHA MASJID BAYANA (c 1300)	KABIRUDDIN AULIA, (LALGUMBAD) DELHI (1325-51)	JAMI MASJID MANDU (c 1440)	ATALA MASJID JAUNPUR (1400)	AGRA FORT (DELHI GATE) (1566)	TOMB OF NIZAMUDDIN, CHANDERI (1550)	BADAL MAHAL CHANDERI (1550)	JAMALA MASJID DELHI (1530)	QILA-I-KUHNA MOSQUE, PURANA QILA, DELHI (1545)	RAJA BIRBAL MAHAL, FATEHPUR SIKRI (1569)
5	STRAIGHT-SIDED HIGH DOMES WITHOUT DRUMS (OR VARIANTS)	QUTB MOSQUE DELHI -REPAIR-	BEGUM PURI MASJID, DELHI (c 1350-75)	JAMI MASJID DHAR (1470)	JAMI MASJID MANDU (1440)	JAMI MASJID CHAMPANER (1485)	NAGINA & KEVDA MASJIDS CHAMPANER (c 1500)	LAT MASJID DHAR (1408)	TOMB OF ADIL SHAH, BURHANPUR (c 1580)					
6	MADRASAS	SULTAN GHARI DELHI (1351-1363)	ALLAUDDIN'S COLLEGE QUTB COMPLEX, DELHI (1320-83)	HAUZ KHAS GROUP (1351-92)	MADRASA OF MOHAMMAD GAWAN BIDAR (1481)	BARA MADRASA BURHANPUR (c 1500)								
7	CIRCULAR DOME CLUSTER AROUND MAIN DOMES	TOMB OF KHAN-E-JAHAN (1375)	ATALA MASJID JAUNPUR (1408)	TOMB OF HOSHANG SHAH MANDU (1440)	TOMB OF SHAH SHUJAH BURHANPUR (c 1450)	JAMI MASJID CHAMPANER (1485)	TOMB OF ISA KHAN, DELHI (1547)	BIBI-KA-MASJID BURHANPUR (1590)						
8	RIBBED FLUTED DOMES	HAUZ KHAS DELHI (1351-63)	ENTRANCE DOME OF KHIRKI MASJID	TOMB OF SHAH ALAM, TIMARPUR, DELHI (c 1375)	JAMI MASJID MANDU (1440)	KEVDA MASJID CHAMPANER (c 1500)	RUPMATI'S PAVILION MANDU (c 1525)	SHAH SHVJAH'S TOMB, BURHANPUR (c 1450)	AHU KHANA BURHANPUR (c 1600)					
9	DOMES WITHOUT SURROUNDING DOME CLUSTER	DADI-POTI KHARERA, DELHI (1400-25)	DAI KA MAHAL MANDU (c 1450)	JAJRI BAYANA (c 1550-75)	ADAM KHAN TOMB DELHI (c 1575)									
10	TOMBS, MOSQUES, PALACES WITH BASEMENT TERRACE (VAULTED)	KHIRKI MASJID DELHI (c 1375)	KALAN MASJID DELHI (c 1380)	JAHAJ MAHAL MANDU (1460)	MOTH-KI-MASJID DELHI (1505)	HUMAYUN TOMB DELHI (1565)	TAJ MAHAL AGRA (1634)	SAFDAR JUNG TOMB, DELHI (1750)						
11	DOMES (OF MOSQUES ETC.) WITH PROPYLON FACADE OF VARIOUS TYPES.	ATALA MASJID JAUNPUR (1408)	JAMI MASJID JAUNPUR (1470)	BADAL MAHAL GATE, CHANDERI (1460)	JAMI MASJID CHAMPANER (1485)	SHISH GUMBAD DELHI (c 15th CENTURY)	BARA GUMBAD LODHI GARDENS (1494)	ARHAI-KANJUR MOSQUE VARANASI (c 1500)	ATGA KHAN'S MASJID, DELHI (c 1580-1600)	MOTH KI MASJID DELHI (1505)				
12	MOSQUE OR TOMB WITH BARREL-VAULTED DOME	CHOTA SONA MASJID, GAUR (1493-1514)	TOMB OF CHANDERI (c 1500)	JODHB MAHAL FATEHPUR SIKRI	RAJA BIRBAL'S MAHAL FATEHPUR SIKRI (c 1569)	JAHANGIR MAHAL AGRA (1570)	ALI SHAHID PIR'S MOSQUE BIJAPUR (c 1590)	FATH KHAN'S GAUR (1657)						
13	STRUCTURES OF OCTAGONAL PLAN AND ELEVATION	SAYYID LODHI TOMBS (1414-1520)	SHER MANDAL PURANA QILA (1556)	SHERSHAH'S MAUSOLEUM, SASARAM (1538)	SALABAT KHAN'S TOMB, AHMADNAGAR (1589)	TOMB OF JAMSHED QULI QUTB UL MULK GOLKONDA (1550)	CHAUKHANDI MOSQUE OF KHALI-LULLA, BIDAR (1441)	TAJ MAHAL AGRA (1634)						
14	PALACE REMAINS	TUGHLAQABAD DELHI (1320-50)	BIJAY MANDAL JAHANPANAH (1350)	KOTLA FIROZ SHAH, DELHI (1355-60)	KUSHAK MAHAL CHANDERI (1560)	FATEHPUR SIKRI (1559)	MAHALS AT BIDAR (1375-1572)	MIHTAR MAHAL BIJAPUR (1527)	JAHAZ MAHAL MANDU (1450-1500)	JAHANGIRI MAHAL AGRA, PALACE-COMPLEX, REDFORT DELHI (1550-1648)				
15	SQUARE OR OCTAGONAL CHATTRIS OR KIOSKS ON MINARS OR ROOF	ROHAN KHER (IMAD SHAHI) (1562)	GAVIL GARH FORT MOSQUE (1547)	KHULDABAD MALIK AMBAR'S TOMB, (1626)	IBRAHIM RAUZA BIJAPUR (1627)	JAMI MASJID LAKSMESVAR (1596)								
16	ARCHITRAVE SHOWN OVER CORNICE	BARID ALI'S TOMB BIDAR, (PLAIN) (1560)	CHARMINAR HYDERABAD (1591)	JAMI MASJID LAKSIMESVAR (FALSE ARCHES) (1596)	QUTB SHAHI TOMB GOLKONDA - MOHAMMAD QUTB (1611)	IBRAHIM RAUZA BIJAPUR (1627)	GOL GUMBAD BIJAPUR (IN ARCH MOTIF) (1656)	TOLI MASJID HYDERABAD (1671)	TARAMATI MOSQUE, GOLKONDA (JALI UNDER CLERE-STORY) (1626-72)					
17	STOREYED TOMBS	PANCH MAHAL FATEHPUR SIKRI (1559)	KUSHAK MAHAL CHANDERI (1560)	AKBAR'S TOMB SIKANDRA (1583)	TOMB OF ABDUR RAHIM KHANI-KHANAN, DELHI (1584)	TOMB OF SAFDARJUNG (1757)								
18	TOMBS WITH INNER GALLERY AROUND DOME BASE	GOL GUMBAD BIJAPUR (1656)	JOD GUMBAD BIJAPUR (1675)											
19	BATTER-WALLED TOMB MOSQUE STRUCTURE	GHIASUDDIN TUGHLAQ TOMB DELHI (c 1300)	FIROZ SHAH'S TOMB, HAUZ KHAS (1351-83)	DADI-POTI TOMBS KHARERA, DELHI (1450-1500)	KHIRKI MASJID DELHI (1575)	BEGUM PURI MASJID, DELHI (1350-1375)	GATE OF PALACE MOSQUE, HISSAR (1351-83)	KABIRUDDIN AULIA, DELHI (1325-51)	BIJAY MANDAL DELHI (1325-51)					
20	TOMBS WITHIN TANKS	SHER SHAH TOMB SASSARAM (1559)	JAL MAHAL NARNAUL (16th CENTURY)	WATER PAVILION BIJAPUR (1527)										

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Appendix IV

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EARLY WEST ASIAN MOSQUE PATTERN POOL

STYLE CATEGORY	NO.	MONUMENTS AND AGE (A.D.)	LAY-OUT FEATURES	MIHRAB DETAILS
EARLY STAGE UMMAYAD ARCHITECTURE	1	KUFA GREAT MOSQUE (REBUILT IN 674)	QIBLA OF SACTUARY TO THE SOUTH	NO MIHRAB
	2	DAMASCUS GREAT MOSQUE 706-714/15	———	ONLY ONE CENTRAL MIHRAB
	3	KHIRBAT AT MAFJAR - c 739 - 44	BASTIONED AND BATTLEMENTED TYPE	,, ,,
	4	AL-AQSA MOSQUE OF JERUSELEM - c 780 (INCEPTION OF THE TIME OF AL-WALID) (705-15)	DOMED INNERMOST BAY IN CENTRAL AXIS	,, ,,
ABBASID	5	DAMGHAN (NEAR THE CASPIAN SEA) TALIK-KHANA MOSQUE	QIBLA TO THE WEST (BRICK CONSTRUCTION)	ONE MIHRAB
	6	BALKH-MASJID-I-TARIKH (FIRST HALF OF 9TH CENTURY)	CURVED PROJECTION ON BACK SIDE OF MIHRAB	SINGLE CENTRAL MIHRAB
	7	SAMANA-GREAT MOSQUE OF AL MUTAWAKKIL - c.848/49-852	SOUTH-WARD QIBLA-(ZIGGURET MINAR IN FRONT OF MOSQUE)	,, ,,
	8	CAIRO-GREAT MOSQUE OF IBN TULUN 876/77-879	QIBLA ON WEST (TWO BAY SANCTUARY)	THREE MIHRAB
	9	KAIROWN (N AFRICA) GREAT MOSQUE (REBUILT - 772 - 74)	SINGLE MINARET AT THE EAST -WEST ENTRANCE-PYRAMIDAL	SINGLE CENTRAL MIHRAB
SPANISH (EARLY & CORDOBAN)	10	CORDOBA-GREAT MOSQUE OF ABDER-RAHMAN I - 786/87	BECAME AN OCTAGONAL CHAMBER IN 962	SINGLE MIHRAB
	11	MEDINA AT ZAHRA - c.941	— — — —	FIVE MIHRABS-CENTRAL WIDER & DEEPER THAN OTHERS
	12	SEVILLE-GREAT MOSQUE - 1172	— — — —	PENTAGONAL CENTRAL MIHRAB
	13	RABAT-MOSQUE OF HASSAN-1191-99	TWO RECTANGULAR OPEN COURT-YARDS ON EITHER SIDE WING OF SANCTUARY AND MORE ON THE NORTH SURROUNDED BY AISLES ALL AROUND	CENTRAL MIHRAB
	14	ALGIERS-GREAT MOSQUE-BEFORE 1096	— — — —	SINGLE PENTAGONAL MIHRAB
	15	TINMAL-JAMI MOSQUE - 1153-54	— — — —	SINGLE OCTAGONAL DEEP CENTRAL MIHRAB
	16	MARRAKESH-QUTUBIYYA MOSQUE - 1162	— — — —	SINGLE PENTAGONAL PROJECTING MIHRAB
FATIMID OF EGYPT	17	CAIRO-AL-AZAR MOSQUE -1131-49	UNIVERSITY OF AL-AZAR BEGAN IN 988 - ALL AISLES RUN PARALLEL TO QIBLA WALL-FOUR CENTRAL ARCHES	NO MIHRAB
	18	CAIRO-MOSQUE AL-HAKIM-990-91	THIN DOME ON QIBLA WALL (RECONSTRUCTED STAGE)	NO MIHRAB
	19	CAIRO MOSQUE AL-JUYUSHI - 1085	RECTANGULAR REAR PROJECTION OF QIBLA	SINGLE MIHRAB
	20	CAIRO-MOSQUE AL-AQMAR - 1125	SOUTH SIDE QIBLA-GRID PATTERN SANCTUARY WITH CENTRAL COURT YARD	,, ,,
	21	CAIRO-MOSQUE OF SALIH TALAI-1160	SOUTH SIDE QIBLA	,, ,,
	22	CAIRO-GREAT MOSQUE OF BEYBERS-1267-69	— — — —	TRIPLE MIHRAB-CENTRAL WITH CURVED AND SIDE-ONES WITH SQUARE RECESS
PERSIAN-SELJUK	23	ISFAHAN-MASJID-I-JAMI-12th CENTURY	DOMED CUBICLE IN FRONT OF CENTRAL THICK WALL OF THE SANCTUARY - CLOISTERS ON ALL THE SIDES, WITH CENTRAL COURT-YARD - SOUTHWARD QIBLA	THREE MIHRABS
SYRIA & IRAQ	24	ALEPPO-MADRASA-I-FIRDAUS - 1235	— — — —	SINGLE MIHRAB
TURKISH (OTTOMAN) - ANATOLIA	25	DUNAYSIR MOSQUE — 1204	RECTANGULAR LAY-OUT OF THREE BAYS-SINGLE DOME IN FRONT OF MIHRAB-MULTIPLE PROJECTIONS AT THE REAR	SINGLE MIHRAB

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Appendix V

Conspectus of the mystic leaders of Islam in India

(This list is not exhaustive but only of the representative Saints of various branches of Sufi Islam who adorned India)

Before A.D. 1200 — Hujwiri of Lahore; Abdul Qadar Gilani (d. 1166)

Chishtia Sufi missionary activity-Khwaja Hasan Muinuddin Chisti (1141-1236) born in Seistan, Reached India in 1193, one year after Ghorid capture of Delhi

Hazrat Qutbuddin Jamaluddin Hansvi (q. 1261) (first of the Char Qutbs. The other three direct sons and successors being Burhanuddin Sufi; Qutbuddin Munavar; Nuruddin Nure Jahan Mughal-Kush; all the four buried at Char Qutab at Hansi

Suhraward upya—(b. 1182 at Multan)
Bahauddin; Ruknuddin (d. 1335

Hamiduddin Sufi Nagauri (d. 1276)
Jalaluddin Tabrizi (Multan (d. 1244)

Lal Shahbaz Qalandar (Mid 13th century

Qutubuddin Bakhtiar Kaki—from Ush in the Farghana, reached later than Khawaja Sahab and died in November 1235 a few months before his death, in a *sama* meeting at Mehrauli.

Fariduddin Ganj Shakar-lived 20 years at Hansi (d. 1265)

Bukharia; Makhdum-e-Jahanian Sayyid Jalal Bukhari (1301-1384) died at Uch (Pakistan)

Aulia Nizamuddin Aulia Badauni (Bukhara-Turkish extraction)

Amir Khusrau (1253-1325)
Nasiruddin-Chiragh-i-Delhi (d. 1356), disciple of Nizamuddin:

Zia-uddin Nakhshabi Badauni
Burhanuddin Gharib (Burhanpur),; (d. 1340 at Daulatabad)
Muhammad Gesudaraz Bandanawaz. bured in Bijapur

Sabr Masud (d Bahraich, U.P.)

Firdausia branch Sharafuddin Yahya Maneri (d. 1380)
His father-in-law Abu Tanwania of Sonargaon
Qalandars Bu Ali Qalandar of Panipat (d. 1323)

Bengal Jalal Tabrizi Multan d. 1244-associated with Sylhet sanctuary

Deccan Zainuddin Daud (1302-1369); Amiruddin Ganj-i-Alam Gijapur (1306-1392)

Shia Islam Shihabuddin Daulatabadi (d. 1445)
Ali Hamadhani (Amir Kabir)—d. 1385, coeval

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with Lalla Jogini of Kashmir
Imaduddin Mahmud Gawan of Rasht
(reached Deccan 1453— d. 1481, murdered)

Muhammad Qasimbu Hindushah alias Firishtha (d. 1623) settled in Bijapur from 1589.

Gujarat : Makhdum Sheikh Ahmad Khattu Ganj Baksh (A.D. 1306), (1445); disciple of Baba Shaq Maghribi of Khattu (Rajasthan)
Sayyid Usman (d. 1530) Sayyid of Vatva, son and successor of Qutbul-Aqtab Sayyid Burhahuddin (Shamai Burhani) founder of the Bukhariya Sayyids—d. 1453)
Muhammad Shah Alam, son of above (d. 1475)
Sayyid Muhammad Maqbul Alam, sixth in descent from Shah Alam and buried at Sarkhej (Rasulabad) near Ahmadabad
Wali-uddin Alawi (whose murshid was Haji Hamiduddin Sheikh Muhammad Ghaus Alam of Gwalior (d. Agra 1562)

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